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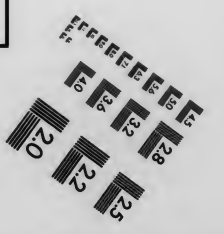
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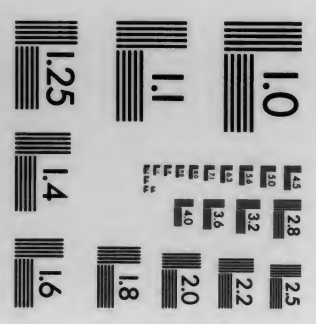
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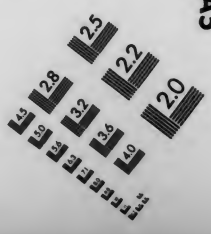
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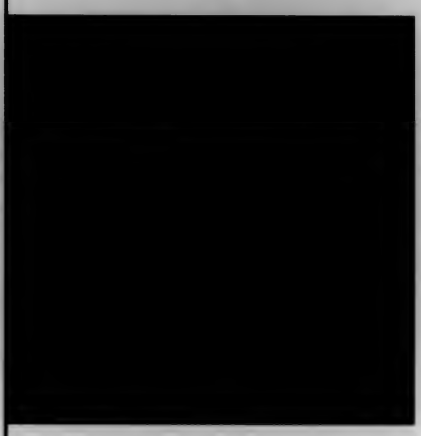
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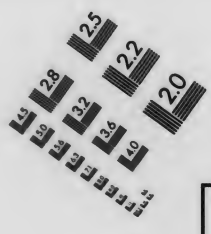
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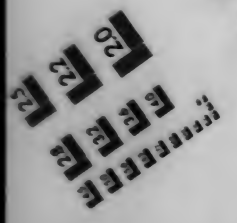


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US Treasury Department  
Federal Excise Taxes on Alcoholic Beverages

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FEDERAL EXCISE TAXES ON ALCOHOLIC BEVERAGES

- PART I - Excise Tax on Distilled Spirits
- PART II - Excise Tax on Fermented Malt Liquors
- PART III - Excise Taxes on Wines
- PART IV - Excise Tax on Rectified Spirits and Wines
- PART V - Comparison of Taxes on Alcoholic Beverages in  
the United States, Canada and United Kingdom

Division of Tax Research, Treasury Department  
June 1948

Federal Excise Taxes on Alcoholic Beverages

MAY 10 1949 BB

One of the important questions in tax revision concerns the changes to be made in the extensive list of excise taxes. This study is one of a series on the commodities and services subject to excise tax. The purpose of the studies is to make available data on tax rates, revenue and the economic background of the industry and to discuss the effects of the tax on profits, business costs, competition and consumers. The administration of the tax and the principal technical problems that arise are also considered. The studies are not intended to make policy recommendations but to provide information and analyses which would be useful in appraising the desirability of revising the taxes.

The study was prepared in the Excise Tax Section of the Division of Tax Research. In its preparation valuable assistance was received from other members of the Treasury tax staff, including the Office of Tax Legislative Counsel on legal matters and the Bureau of Internal Revenue on administrative matters.

Division of Tax Research  
U. S. Treasury Department

June 1948

# FEDERAL EXCISE TAXES ON ALCOHOLIC BEVERAGES

## TABLE OF CONTENTS

### PART I - Excise Tax on Distilled Spirits

	<u>Page No.</u>
I. Description of the tax .....	1
II. Changes in the tax since 1913 .....	2
III. Revenue collections, 1936-1947 .....	2
IV. Economic background of the industry .....	3
A. Character of supply .....	3
1. Sources of supply and types of products .....	3
2. Concentration of supply .....	9
3. Competition and price policy .....	11
4. Costs and prices .....	15
B. Character of demand .....	16
C. Outlook for the industry .....	18
V. Effects of the tax .....	21
A. On profits .....	21
B. On business costs and competition .....	24
C. On consumers .....	25
VI. Administration and compliance .....	26
VII. Technical problems .....	28
A. Floor stocks taxes and refunds .....	28
B. Drawback on distilled spirits used in non-beverage products .....	31
PART II - Excise Tax on Fermented Malt Liquors ....	
I. Description of the tax .....	33
II. Changes in the tax since 1913 .....	33
III. Revenue collections, 1936-1947 .....	34
IV. Economic background of the industry .....	35
A. Character of supply .....	35
B. Character of demand .....	44
C. Outlook for the industry .....	47

(Continued)



# TABLE OF CONTENTS

- 2 -

PART II - (Continued)		Page No.
V.	Effects of the tax .....	50
	A. On profits .....	50
	B. On competition .....	54
	C. On consumers .....	55
VI.	Administration and compliance .....	56
VII.	Technical problems .....	56
	A. Floor stocks taxes and refunds .....	56
	B. The taxation of imported beer .....	59
PART III - Excise Taxes on Wines .....		60
I.	Description of the tax .....	60
II.	Changes in the tax since 1913 .....	60
III.	Revenue collections, 1936-1947 .....	62
IV.	Economic background of the industry .....	62
	A. Character of supply .....	62
	1. Types of wines and sources of supply .....	62
	2. Concentration of production .....	66
	3. Competition and price policy .....	68
	4. Costs and prices .....	72
	B. Character of demand .....	74
	C. Outlook for the industry .....	78
V.	Effects of the tax .....	79
	A. On profits .....	79
	B. On competition .....	81
	C. On consumers .....	82
VI.	Administration and compliance .....	83
VII.	Technical problems .....	83
	A. Rates for different types of wine .....	83
	B. Floor stocks taxes and refunds .....	84

(Continued)

# TABLE OF CONTENTS

- 3 -

	<u>Page No.</u>
PART IV - Excise Tax on Rectified Spirits and Wines ...	88
I. Description of the tax .....	88
II. Changes in tax rate .....	88
III. Revenue collections, 1936-1947.....	89
IV. Economic background of the industry .....	89
V. Effects of the tax .....	92
VI. Administration and compliance .....	93
PART V - Comparison of Taxes on Alcoholic Beverages in the United States, Canada and United Kingdom .	94
I. Limitation on comparisons .....	94
II. Types of taxes levied on alcoholic beverages .....	94
A. Canada .....	94
B. United Kingdom .....	96
III. Comparison of taxes for selected products .....	99
Appendix - Special Taxes Relating to Distilled Spirits, Fermented Malt Liquors and Wine as of December 31, 1947 .....	101



# TABLE OF CONTENTS

- 4 -

## TABLES

		<u>Page No.</u>
PART I	- Excise Tax on Distilled Spirits:	
1	Distilled spirits: Tax-paid withdrawals, production at registered and fruit distilleries, and stocks in internal revenue bonded warehouses, fiscal years 1935-1947.....	4
2	Types of distilled spirits available for consumption as beverages, 1941.....	6
3	Whisky: Domestic production, tax-paid withdrawals, and stocks on hand June 30, fiscal years 1934-1947	7
4	Amount of whisky bottled by types and amount produced by rectification, fiscal years 1939-1947	8
5	Whisky by types: Number of brands and price range in Virginia State stores 1937, 1939, and 1947 ....	13
6	Disposable income, tax-paid withdrawals of distilled spirits and consumer expenditures for distilled spirits, 1935-1946.....	19
7	Stocks of whisky in internal revenue bonded warehouses as of June 30, 1946 and 1947 .....	20
8	Number of corporation income tax returns, receipts and net income of distillers and distributors of distilled spirits, 1938-1945 .....	22
9	Net profits and rate of return on net worth of distillers reporting to Securities and Exchange Commission, 1936-1946 .....	23
10	Floor stocks of tax-paid distilled spirits in possession of producers and distributors on dates of imposition of floor stocks taxes under Revenue Acts of 1940-1943 .....	30

# TABLE OF CONTENTS

- 5 -

## TABLES (Continued)

		<u>Page No.</u>
PART II	- Excise Tax on Fermented Malt Liquors:	
1	Number of breweries operated, production, and withdrawals of fermented malt liquors, fiscal years 1934-1947 .....	36
2	Fermented malt liquors: Number of breweries and production grouped according to the number of breweries operated in a State, fiscal year 1947..	37
3	Production and consumption of fermented malt liquors by regions and States, 1941 .....	38
4	Number of breweries and production of fermented malt liquors by size of brewery, fiscal year 1946	41
5	Disposable income, tax-paid withdrawals of beer and consumer expenditures for beer, 1934-1946....	45
6	Materials used and production of fermented malt liquors, fiscal years 1935-1947 .....	49
7	Breweries and malt producers: Number of corporation returns, compiled receipts, net income or deficit, and income taxes, 1938-1945...	51
8	Net profits before and after income taxes, and rate of return on net worth of breweries reporting to Securities and Exchange Commission, 1936-1946 .....	52
9	Fermented malt liquors: Tax and tax plus mark-up on the tax for selected retail sales units and various changes in rate of tax per barrel .....	53
10	Floor stocks of tax-paid fermented malt liquors in possession of producers and distributors on dates of imposition of floor stocks taxes under Revenue Acts of 1940-1943.....	58

# TABLE OF CONTENTS

- 6 -

## TABLES (Continued)

		<u>Page No.</u>
PART III	- Excise Taxes on Wines:	
1	Still wines: Wineries operated, production, tax-paid withdrawals, and stocks on June 30, fiscal years 1935-1947 .....	64
2	Sparkling wines: Premises operated, production, tax-paid withdrawals, and stocks on June 30, fiscal years 1935-1947 .....	65
3	Number of establishments producing wine and value of products classified by size of value of products, 1939 .....	67
4	California grapes: Harvested production, crush by commercial wineries, and average price paid to farmers for grapes crushed by wineries, 1933-1947 .....	70
5	Wines by types: Number of brands and price range in Virginia State stores 1937, 1938 and 1947 .....	73
6	Domestic still wines: Wholesale prices in bulk in San Francisco and retail prices in Pennsylvania State stores, 1933-1936.....	75
7	Disposable income, tax-paid withdrawals of wine and consumer expenditures for wine, 1934 - 1946 .....	77
8	Wine producers: Number of corporation returns, compiled receipts, net income or deficit, and income taxes, 1938-1945 .....	80
9	Still wines: Tax-paid floor stocks in possession of producers and distributors on date of imposition of floor stocks taxes under Revenue Acts of 1941-1943 .....	86
10	Sparkling wines: Tax-paid floor stocks in possession of producers and distributors on date of imposition of floor stocks taxes under Revenue Acts of 1941-1943 .....	87

TABLE OF CONTENTS

- 7 -

TABLES (Concluded)

PART IV - Excise Tax on Rectified Spirits and Wines:

Page No.

1	Production of rectified spirits and wines by types, fiscal years 1936 - 1947 .....	90
2	Domestic distilled spirits: Tax-paid withdrawals and amount used for rectification, fiscal years 1912 - 1918, and 1935 - 1947 .....	91

## FEDERAL EXCISE TAXES ON ALCOHOLIC BEVERAGES

### PART I - Excise Tax on Distilled Spirits 1/

#### I. Description of the tax

The tax is applicable to all distilled spirits produced or imported into the United States, and all products of distillation containing distilled spirits or alcohol on which the tax has not been paid. The tax is levied at a specific rate on the proof gallon or wine gallon, if below proof. 2/

Payment of tax is required at the time the product is withdrawn from the internal revenue or customs bonded warehouse. The tax is paid by purchasing tax stamps to be affixed to the containers prior to withdrawal from bond.

The principal exemptions from tax are withdrawals for the following purposes:

1. Export.
2. Ethyl alcohol for industrial use or in the manufacture of chemicals. 3/
3. Ethyl alcohol for use by the Federal, State or local governments, a university or college, laboratory for scientific research, or hospital or charitable clinic.
4. Brandy and wine spirits for use in the fortification of wine.

---

1/ This analysis is limited to the gallonage tax. In addition to this tax there are special taxes on distillers, dealers and others engaged in the industry as well as stamp taxes on containers. (See Appendix, p. 101.) The tax on rectification is considered in Part IV below.

2/ The proof gallon or gallon of proof spirits is one "which contains one-half its volume of alcohol of a specific gravity of ... (.7939) at sixty degrees Fahrenheit" (Internal Revenue Code, Section 2809). Imported perfumes containing distilled spirits are taxed on the basis of the wine gallon of perfume.

3/ Provided it is rendered unfit for beverage or liquid medicinal purposes, or is changed into some other chemical substance.

## II. Changes in the tax since 1913

Distilled spirits have been taxed continuously since 1862. During the prohibition period withdrawals of beverage spirits were permitted only for medicinal purposes, and such spirits were taxed at the non-beverage rate then in effect. Beginning with the Revenue Act of 1942 a drawback has been allowed on distilled spirits used in medicines, food flavorings and food products unfit for beverage purposes. The tax rates and effective dates of changes since 1913 are shown below:

### Changes in tax rates since 1913

(Per proof gallon)

Revenue Act	: Effective date	: Rate	:: Revenue Act	: Effective date	: Rate
	In effect				
	Jan. 1, 1914	\$ 1.10	1938	July 1	\$ 2.25 <u>d</u> /
1917	Oct. 3	3.20 <u>a</u> /	1940	July 1	3.00 <u>e</u> /
1918	Feb. 24, 1919	6.40 <u>a</u> /	1941	Oct. 1	4.00
1926	Dec. 5, 1933 <u>b</u> /	1.10	1942	Nov. 1	6.00 <u>f</u> /
1934 <u>c</u> /	Jan. 12	2.00	1943	Apr. 1, 1944	9.00 <u>g</u> /

a/ Beverage rate. Rates for other than beverage purposes were \$2.20 under Revenue Act of 1917, effective October 3, 1917; \$1.65 and \$1.10 under the Revenue Act of 1926, effective January 1, 1927 and January 1, 1928, respectively.

b/ Made effective by the Twenty-first Amendment to the Constitution.

c/ Liquor Taxing Act of 1934.

d/ Brandy taxed at \$2.

e/ Brandy taxed at \$2.75.

f/ Drawback of \$3.75 if used in flavorings, medicines, or food products unfit for beverage purposes.

g/ Drawback of \$6 if used in flavorings, etc.

## III. Revenue collections, 1936-1947

The tax on distilled spirits is the largest single source of excise tax revenue. This tax produced 68 percent of the total collections from taxes on alcoholic beverages and 23 percent of total excise tax collections for the fiscal year 1947.

Collections, fiscal years 1936-1947 a/

(In millions)

Fiscal year	:	Collections	::	Fiscal year	:	Collections
1936	:	\$ 222.4	::	1942	:	\$ 574.6
1937	:	274.0	::	1943	:	781.9
1938	:	260.1	::	1944	:	899.4
1939	:	283.6	::	1945	:	1,484.3
1940	:	317.7	::	1946	:	1,746.6
1941	:	428.6	::	1947	:	1,685.4

a/ Represents collections from the gallonage tax only.  
Collections do not reflect drawbacks allowed on spirits  
for non-beverage use.

IV. Economic background of the industry

A. Character of supply

1. Sources of supply and types of products

Prior to the war domestic production accounted for about 90 percent of the distilled spirits consumed in the United States. After restrictions were placed on domestic production imports increased and reached a peak of more than one-third of consumption in the fiscal year 1944. (Table 1) Imported spirits are subject to both customs duty and the internal excise tax. The duties have tended to limit imports to specialty products, of which Scotch whisky has normally been the most important. Under the Geneva trade agreements the duty was reduced effective January 1, 1948 from \$2.50 per proof gallon to \$2.25 on rum, \$1.50 on whisky and \$1.25 on brandy, gin, cordials and liqueurs.

The tax on distilled spirits is applicable to a wide variety of products. However, most of the tax base normally is represented by whisky, which is sold either as straight whisky or blended with neutral spirits. 1/ In 1941, the last year when domestic production

1/ Whisky blended with neutral spirits must be labeled as "blended whisky" or "spirit whisky", according to the composition, and is commonly referred to as a "spirit blend". (Regulations No. 5, issued under provisions of the Federal Alcohol Administration Act, as amended, Secs. 21 and 34.)



Table 1

Distilled spirits: Tax-paid withdrawals, production at registered and fruit distilleries, and stocks in internal revenue bonded warehouses, fiscal years 1935-1947

(In millions of tax gallons) 1/

Fiscal year	Tax-paid withdrawals				Stocks in bonded ware- houses at end of fiscal year 2/	
	Distilled spirits		Ethyl alcohol	Production		
	Total	Domestic				
1935	82.5	58.1	7.5	17.0	169.1	160.8
1936	110.2	76.3	9.8	24.1	253.9	310.8
1937	136.2	87.7	16.1	32.3	259.0	462.6
1938	129.2	85.9	14.3	29.0	150.2	497.5
1939	125.7	92.4	11.1	22.2	145.3	522.1
1940	140.7	104.0	12.4	24.3	143.5	525.4
1941	141.8	102.7	11.2	27.9	175.2	551.4
1942	157.7	119.3	13.5 3/	24.9	158.0 4/	587.8
1943	154.6	131.2	17.8 3/	5.7	39.9 4/	476.3
1944	142.2	84.3	51.7 3/	6.2	23.8 4/	376.3
1945	168.6	114.5	26.3 3/	27.8	128.2 4/	338.2
1946	197.9	130.9	19.7 3/	47.3	305.1 5/	420.3
1947	189.1	126.4	15.6 3/	47.1	315.2	525.8

Treasury Department, Division of Tax Research

Source: Annual Reports of the Commissioner of Internal Revenue; press releases of Bureau of Customs and Bureau of Internal Revenue, Accounts and Collections Unit.

- 1/ A tax gallon for spirits of 100 proof or over is equivalent to the proof gallon. For spirits of less than 100 proof the tax gallon is equivalent to the wine gallon. On most domestic distilled spirits the tax is paid on the proof gallon. Most distilled spirits imported are somewhat below 100 proof and the tax is paid on the wine gallon.
- 2/ Represents original entry gallons.
- 3/ Estimated from sales of revenue stamps.
- 4/ Exclusive of unfinished and high-proof spirits for industrial purposes.
- 5/ Includes 31.5 million tax gallons produced for industrial purposes.



was not affected by wartime restrictions, the distilled spirits bottled in the United States for beverage purposes consisted of about 85 percent whisky, 10 percent gin, and the balance chiefly of brandy, cordials and liqueurs, and rum. (Table 2) In the same year whisky comprised about 70 percent of total distilled spirits imports, but the war in Europe subsequently reduced the proportion. Rum is normally the next most important type of distilled spirits imported.

All distilled spirits must be produced or imported under bond to insure payment of the tax. Some types are normally aged before they are withdrawn from Government bonded warehouses and bottled for sale. Most whisky, brandy, and rum are aged in this manner and on certain types the ageing period is prescribed by the Government. 1/ Gin customarily is not aged before being withdrawn for consumption. This is also the case with alcohol or neutral spirits used in blended whisky. 2/

Because of the varied character of the products, the supply of domestic distilled spirits withdrawn for consumption is normally derived partly from current production and partly from accumulated stocks. The supply of whisky, in particular, over short periods of time depends upon the size and age composition of stocks. However, as indicated by the wartime experience, the industry has considerable flexibility in the way in which given stocks may be utilized. In general, an increase in demand for whisky may be met by one or more of the following types of adjustment in the use of the available stocks: (1) reducing total stocks, (2) selling less straight whisky and more blended whisky, (3) increasing the proportion of neutral spirits or alcohol used in spirit blends, and (4) reducing the proof, or percentage of alcoholic content. The increase in wartime demand for whisky, when only limited production was permitted, was met principally by reducing stocks and by using a larger proportion of the withdrawals of whisky to make spirit blends, a process commonly referred to as "stretching" stocks. Stocks of whisky in bonded warehouses declined from 517 million proof gallons on June 30, 1942 to 308 million proof gallons on June 30, 1945. (Table 3) In the fiscal year 1947 about 90 percent of the whisky bottled in the United States was blended compared with about 50 percent in the fiscal year 1943, the earliest year for which this information is available. (Table 4) Except

1/ To be labeled as a "straight whisky" whisky must be aged for not less than two years; to qualify as "bottled in bond" distilled spirits must be aged for not less than four years.

2/ Under the law whisky is distilled at not over 160 proof, alcohol or neutral spirits at 160 proof or more. Temporary legislation permits distilleries to produce spirits at 160 proof or more and remove them without reducing them below 160 proof. (Internal Revenue Code, Sec. 2883(c)(d) and (e).)

Table 2

Types of distilled spirits available  
for consumption as beverages, 1941 <sup>1/</sup>

(Millions of gallons)

Type of product	Bottled domestically <sup>2/</sup>		Imported	
	Amount	Percent dis- tribution	Amount	Percent dis- tribution
	(Wine gallons)		(Proof gallons)	
Whisky	119.5	85.1 %	10.3	71.0 %
Rum	1.4	1.0	3.6	25.1
Gin	13.3	9.5	.1	.4
Brandy	2.0	1.4	.3	2.2
Cordials and liqueurs	3.8	2.7	.1	.9
Alcohol	.3	.2	<u>3/</u>	<u>4/</u>
Other spirits	.2	.1	.1	.4
Total	140.5	100.0	14.5	100.0

Treasury Department, Division of Tax Research

Sources: Annual Report of the Commissioner of Internal Revenue for the Fiscal Year Ended June 30, 1941, p. 163, and Department of Commerce, Foreign Commerce and Navigation of the United States, 1941.

<sup>1/</sup> Domestic bottling for fiscal year, imports for calendar year.

<sup>2/</sup> Includes some imported products used in rectification or bottled after withdrawal from customs custody.

<sup>3/</sup> Less than 50,000 gallons.

<sup>4/</sup> Less than .05 percent.

Note: Tax-paid withdrawals of ethyl alcohol in the fiscal year 1941 were about 27.9 million gallons. About 22.8 million gallons were used for rectifying purposes as components of the above beverages bottled domestically. The remaining 5.1 million gallons were presumably used in medicines, flavorings, and other products.

Table 3

Whisky: Domestic production, tax-paid withdrawals, and stocks on hand June 30, fiscal years 1934 - 1947

(In millions of tax gallons <sup>1/</sup>)

Fiscal year	Production	Tax-paid withdrawals	Stocks in internal revenue bonded warehouses at end of fiscal year
1934	62.4	18.9	57.7
1935	149.1	50.8	152.8
1936	223.7	67.3	300.7
1937	223.5	72.6	445.3
1938	102.9	68.6	471.2
1939	93.0	72.1	478.9
1940	99.0	81.3	480.9
1941	121.9	80.5	504.1
1942	120.3	84.7	516.9
1943	19.5	87.9	424.8
1944	-	58.8	348.6
1945	41.6	63.9	307.6
1946	147.5	63.2	374.1
1947	168.0	58.8	464.8

Treasury Department, Division of Tax Research

Source: Annual Report of the Commissioner of Internal Revenue, for the Fiscal Year Ended June 30, 1947.

<sup>1/</sup> A tax gallon for spirits of 100 proof or over is equivalent to the proof gallon. For spirits of less than 100 proof the tax gallon is equivalent to the wine gallon.

Table 4

Amount of whisky bottled by types and amount  
produced by rectification, fiscal years 1939-1947

(Millions of gallons)

Fiscal year	Types of whisky bottled 1/					Whisky used in and pro- duced by rectification 2/		
	Bottled:	Straight:	Blended:	Total	Blended :	Whisky :	Whisky :	Whisky
	in				whisky as:	Whisky:	Whisky :	used as a
	bond :	3/	4/		percent :	used :	produced:	percent
					of			of whisky
					total 4/:			produced
(Wine gallons)					(Proof gallons)			
1939	6.3	5/	5/	5/	5/	13.6	33.6	40.3
1940	13.6	5/	5/	5/	5/	15.3	38.0	40.3
1941	13.5	5/	5/	119.5	5/	17.0	44.3	38.4
1942	13.4	5/	5/	136.0	5/	20.7	56.0	36.9
1943	16.6	48.6	70.1	135.3	51.8	29.0	60.8	47.8
1944	9.3	20.2	66.9	96.4	69.4	32.1	57.9	55.5
1945	9.6	15.9	117.7	143.2	82.2	40.8	101.6	40.2
1946	7.0	12.7	144.1	163.8	88.0	45.8	124.7	36.7
1947	9.3	7.2	149.7	166.2	90.1	43.7	130.7	33.4

Treasury Department, Division of Tax Research

Source: Annual Reports of the Commissioner of Internal Revenue.

- 1/ Includes imported and domestic liquors. Includes products bottled for exportation except in 1947.
- 2/ The difference between the amount used and the amount produced represents principally alcohol and high-proof spirits mixed with straight whisky to produce blended whisky. Rectified whisky produced is included under blended whisky bottled.
- 3/ Includes a small amount of whisky aged less than two years which is not eligible for labelling as "straight whisky".
- 4/ Includes blends of straight whisky.
- 5/ Not available.

during the fiscal years 1943 to 1945, when the supply of spirits available for blending purposes was sharply curtailed, the proportion of whisky used in blends decreased after 1940. 1/

## 2. Concentration of supply

For about 15 years the distilling industry was prohibited from operating for the purpose of producing beverage spirits. After the repeal of prohibition in 1933 facilities for the production and distribution of distilled spirits had to be almost completely re-established. The re-established industry differs in certain important respects from that which had developed prior to prohibition, and has to some extent the characteristics of a new industry. Prior to prohibition a very high degree of concentration of control had been achieved at one time in the production and sale of distilled spirits. 2/

Most of the present plants in the industry have been newly built, re-built, or converted from industrial alcohol production. Prior to prohibition most distilleries were small and the number had declined steadily for a period of years. 3/ In 1916 there were 279 grain distilleries operated, and of these about two-thirds had a capacity of less than 2500 proof gallons per day. 4/ Since the industry resumed operations, the number of grain distilleries has not exceeded 150. Only about 15 percent of those now authorized to operate have a capacity of less than 2500 proof gallons per day, and the capacity of the 12 largest distilleries is as large as the total amount produced in 1916. 5/

- 1/ Under the regulations, a "blended whisky" may contain not more than 80 percent neutral spirits, and "spirit whisky" not more than 95 percent neutral spirits. Whisky must be at least 80 proof.
- 2/ In 1899 it was reported that The Distilling Company of America and its subsidiaries controlled about 85 percent of the production of neutral spirits and about 90 percent of the standard brands of Kentucky whisky. The control of rye whisky production was substantially lower at that time. (House of Representatives, Preliminary Report on Trusts and Industrial Combinations, 56th Congress, 1st Session, Doc. No. 476, Part I, pp. 85, 86.)
- 3/ Treasury Department, Bureau of Industrial Alcohol, Statistics Concerning Intoxicating Liquors, 1933, p. 45. In 1901 there were 1,258 grain distilleries operated.
- 4/ Annual Report of the Commissioner of Internal Revenue, fiscal year 1916, p. 136. Data are reported on the basis of grain capacity and have been converted on the basis of 5 proof gallons per bushel of grain.
- 5/ Unpublished data of the Bureau of Internal Revenue.

Although a number of producers entered the business following the resumption of the legal sale of beverage spirits, four companies have assumed a leading position in the industry. 1/ These companies began operations with large amounts of capital which enabled them to establish organizations for national distribution of their products. Some of them also owned or acquired most of the important brand names which had been used prior to prohibition. 2/ By 1938 these four companies accounted for more than half of the production of whisky and of the stocks of whisky held in bonded warehouses. 3/ During the war the four leading companies acquired additional distilleries or purchased some of the stocks owned by other companies and in September, 1943 they held nearly 60 percent of the total stocks of whisky. 4/ This high proportion of control of inventories placed these companies in a favorable position to establish strong consumer preferences in the postwar market. For the fiscal year 1947, the four companies accounted for 75 percent of the domestic whisky bottled for consumption. 5/

The industry has a producing capacity greatly in excess of consumption. 6/ However, in view of the restrictions that have prevailed on the production of beverage spirits during most of the time since 1942, capacity has not been as important a factor in the market position of the companies as the stocks of whisky held. In 1938 the estimated capacity of all whisky distilleries was 435 million proof gallons. 7/ The largest amount produced in any year after repeal was 224 million proof gallons in 1936. (Table 3) The maximum tax-paid withdrawals have been substantially smaller than this amount. Present producing capacity appears to be approximately twice as large as the prewar level, but the larger whisky distillers now produce a large proportion of their high proof spirits for blending purposes. 8/

1/ Temporary National Economic Committee, Investigation of Concentration of Economic Power, Part 6, "Liquor Industry".

2/ Ibid., p. 2490

3/ Ibid., pp. 2678, 2680.

4/ U. S. Senate, Hearings before a Subcommittee of the Committee on the Judiciary, 78th Congress, 1st Session, p. 158. These companies also acquired a substantial interest in the wine industry and subsequently acquired some rum distilleries.

5/ Unpublished data of the Bureau of Internal Revenue. The proportion of whisky bottled by these companies is higher than the proportion of whisky produced. A higher proportion of their sales consists of spirit blends compared with the balance of the industry.

6/ Excess capacity appears to have been a characteristic of the industry prior to prohibition. (Report on Trusts and Industrial Combinations, op. cit., p. 81.)

7/ Temporary National Economic Committee, op. cit., p. 2677.

8/ Unpublished data of the Bureau of Internal Revenue.



In view of the large producing capacity of the industry the relative position of different companies under unrestricted production will depend to a large extent upon the distribution facilities and the merchandising policies of the several companies.

Imports of the principal types of products are usually handled by exclusive distributors. In some cases a domestic distiller is the agent for these products. 1/

### 3. Competition and price policy

Despite the relatively large importance of the tax the products of the industry are sold over a fairly wide price range. Price differentiation may arise from a number of factors. In the case of whisky, differences in price may reflect differences in the age of the product offered, whether it is a straight or blended whisky, the proportion of neutral spirits used in blended whisky, and the proof of the product; in addition to these factors the reputation of the producer or the popularity of the brand may be important. 2/ There are indications that the industry's pricing methods place great stress on the consumer's preference for particular types or characteristics of products. 3/ Whisky is now sold in two fairly distinct price classes, the older straight whiskies and whisky blends. 4/ Just prior to the war younger straight whisky sold at prices competitive with the blended products. Gin, an unaged product, usually sells at lower prices than whisky. Some low-priced brands of rum and brandy sell for less than gin, but most of the brands sell at prices comparable to whisky.

Distilled spirits are generally sold under brand names. In some cases the products of a distiller will be sold under the private brand of a distributor, but since the repeal of prohibition most sales have been made under producer brands. Each of the larger companies

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1/ TNEC, op. cit., p. 2583 et seq.

2/ The discussion refers to normal supply conditions. An unusual scarcity or oversupply of one class of products would affect its relationship to the prices of other products.

3/ Considerable attention was given to this question in the TNEC Hearings in 1939, but from the evidence the basis of pricing was not clear.

4/ Straight whisky includes whisky of a given season's production which may or may not be bottled-in-bond and also mixtures of the production of different years. The latter may not be labeled bottled-in-bond and are usually referred to as blends of straight whiskies. Imported specialty whiskies such as Scotch, Irish or Canadian usually sell at or above the prices of the older domestic straight whiskies.

has a number of brands covering different types of whiskies and different price lines, and they also have popular brands of gin and certain other distilled spirits. The relative emphasis placed on straight whisky and blends differs considerably among companies. Both before and during the war new brands were frequently introduced. The total number of active brands, excluding private brands, is probably substantially in excess of 100. In one State store prices are listed for 74 brands of domestic whisky and 34 brands of imported whisky. (Table 5) Although there has been no decrease in the number of brands carried in these stores since 1939, it is possible that the total number of brands for the country has decreased. It appears, however, that there has been a marked increase in the concentration of sales in leading brands. It has been stated that the five leading brands now account for nearly 50 percent of total whisky sales compared with not more than 20 percent prior to the war. 1/ Increasing concentration of sales in a limited number of brands, similar to that which has occurred in the cigarette and a number of other industries, has been predicted. 2/ Such a development is characteristic of decreasing price competition, but it is not yet clear to what extent the change that has taken place represents a definite trend and to what extent it is a reflection of the wartime shortages in supplies. The substantial increases in advertising expenditures of leading companies from 1934 to 1938 would indicate increasing effort to establish consumer preference. 3/

The development of the price policy of the industry has been affected by unusual conditions during most of the period since 1933. Although no reliable price series is available, it is generally reported that prices declined substantially as the industry accumulated an adequate supply of aged whisky in the 1930's. 4/ There is evidence that the decreases in prices during the latter part of the prewar period were confined largely to bottled-in-bond products. (Table 5) Information on certain leading brands indicates, however, that prices on established brands were not changed very frequently. 5/ There is some evidence that larger distillers gave special discounts from list prices prior to the war when market conditions were unsettled. 6/ Smaller distillers probably have to sell their products on a price basis where they are unable to support a national system of distribution or intensive advertising. Price competition may also arise through the introduction of a new brand.

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1/ Journal of Commerce, Fifteenth Annual Wine and Spirits Number, November 21, 1947, pp. 2, 6. Both figures are presumably based on sales data for monopoly States,

2/ Ibid., p. 2.

3/ TNEC, op. cit., pp. 2717-2718. The advertising expenditures, which are shown only for newspapers and national magazines, increased from \$4.2 million in 1934 to \$11.9 million in 1938,

4/ Ibid. Testimony of a number of witnesses.

5/ Ibid., p. 2696. On most of these brands list prices were changed only two or three times in a 4-year period 1934-1938.

6/ Business Week, September 28, 1940, p. 45.



Table 5

Whisky by types: Number of brands and price range  
in Virginia State stores 1937, 1939 and 1947

(4/5 quart sizes, 90-proof basis 1/)

Type	Number of brands			Price range					
	: July 16, 1937	: Feb. 1, 1939	: Dec. 1, 1947	: July 16, 1937	: Feb. 1, 1939	: Dec. 1, 1947	: July 16, 1937	: Feb. 1, 1939	: Dec. 1, 1947
	: 1937	: 1939	: 1947	: High	: Low	: High	: Low	: High	: Low
Blended whisky	12	15	40	\$1.95	\$1.00	\$1.90	\$1.05	\$4.10	\$2.75
Whisky (less than 2 years old)									
Bourbon	5	3 )	4	1.05	1.00	1.05	1.00	2.60	2.55
Rye	1	1 )		.95	.95	1.00	1.00		
Corn	2	0	2	1.00	.90	-	-	2.60	2.60
Straight whisky <u>2</u> /									
Bourbon	14	20	7	1.50	1.15	1.50	1.00	5.15	3.10
Rye	10	11	1	1.40	1.10	1.70	1.05	4.60	4.60
Corn	1	4	0	1.05	1.05	1.10	1.05	-	-
Blends of straight whisky <u>2</u> /									
Bourbon	6	6 )	3	2.20	1.25	2.30	1.30	4.15	3.80
Rye	3	3 )		2.30	1.50	2.25	1.50		
Bottled in bond									
Bourbon	5	5	11	3.60	2.30	2.25	1.85	5.35	4.35
Rye	3	5	2	2.35	2.35	2.00	1.75	5.00	4.70
Scotch type									
American whisky	0	0	1	-	-	-	-	3.90	3.90
Total domestic	62	73	74 <u>3</u> /						
Canadian whisky	3	3	3	3.40	2.75	3.45	3.00	4.95	4.60
Scotch whisky	14	17	29	3.65	2.40	3.80	2.30	7.05	4.80
Irish whisky	2	2	2	2.65	2.55	2.70	2.60	4.85	4.75
Irish American whisky	1	1	0	1.45	1.45	1.70	1.70	-	-
Total imported	20	23	34						

Treasury Department, Division of Tax Research

Source: TNEC, Investigation of Concentration of Economic Power, Part 6, "Liquor Industry", March 1939, Exhibits 419, 433; and Alcoholic Beverage Control Board, Commonwealth of Virginia, List No. 113, effective December 1, 1947.

1/ In order to eliminate differences in price due to differences in proof, the sales prices for brands other than 90 proof were converted to a 90 proof basis. For the years 1937 and 1939 prices were usually quoted on quart sizes and have been reduced by 20 percent for comparability with present prices which are commonly on the basis of the 4/5 quart bottle. All figures have been rounded to the nearest 5 cents.

2/ Straight whisky is whisky that is at least 2 years old.

3/ Includes three brands of bourbon whisky liqueurs, ranging from \$2.25 to \$2.35.

However, in view of the apparent emphasis being placed on brand preference, future changes in demand may result in less price variation than in the past.

Price policies at the wholesale and retail level differ between the so-called monopoly and license States. In 17 States where the sale of distilled spirits is conducted by the State, prices are usually fixed on the basis of a uniform mark-up. 1/ Except for cut-price sales, the price to the consumer on package sales among these States varies only by the amount of the mark-up and any tax that may be imposed. 2/

In the license States there has been an increasing effort to secure resale price maintenance. Although some producers distribute their products through exclusive wholesalers this is not the general practice in the industry. Prior to the war some wholesalers apparently had engaged in cutting prices to retailers. 3/ Intensive price wars were experienced at the retail level on several occasions but they were generally concentrated in certain areas, particularly in the large metropolitan centers. 4/ Experience of distributors led both wholesalers and retailers to join in efforts to "stabilize" the industry and to induce distillers to price their products under the Fair Trade Acts. In some States laws were passed requiring fair trade pricing, in contrast to the usual type of law which permits producers to prescribe resale prices, and in some cases a minimum and profitable retail mark-up was required. 5/ The wartime increase in demand and subsequent limitations on supplies tended to relieve the industry of the problem of resale price maintenance. The effectiveness of the laws will not be known until the industry has again built up adequate supplies to meet the demand.

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1/ One State has a monopoly at the wholesale but not at the retail level.

2/ Under a provision known as the "Des Moines demand warranty" the purchase agreement of State monopolies apparently assures them of the lowest price at which a distiller sells to any buyer. (U.S. Senate, Hearings before a Subcommittee of the Committee on the Judiciary, op. cit., p. 199; and TNEC, op. cit., p. 2572 et. seq.)

3/ Report of the Federal Trade Commission on Resale Price Maintenance, p. 370.

4/ The two most extreme price wars occurred in 1935-36 and in 1940. Two-year-old whisky first became freely available in 1935-36 while 1940 represented a four-year-ago for the very large production of 1936. Those two ages are those when whisky can be used for straight whisky and bottled-in-bond, respectively.

5/ Federal Trade Commission, op. cit., p. 87.

#### 4. Costs and prices

Producer costs of distilled spirits are fairly uniform, except for differences in ageing or special processing that may be involved. In general there are not large differences in distilling and bottling costs for a given class of product. The cost of distilling depends largely upon the raw material used. Grain is the principal raw material for the production of whisky and gin; brandy is produced from various fruits and rum is produced from molasses. In 1939 the cost of materials represented about one-third of the value of products at the distillery, and salaries and wages about 12 percent. <sup>1/</sup> The average value of whisky per proof gallon at the still was about 50 cents compared with 60 cents in 1937. Packaging costs, which include bottling, labeling and casing, are not reported by the Census. Prior to the war these costs were estimated to amount to 40 cents per gallon or nearly as much as the cost of distilling. <sup>2/</sup>

Ageing may result in substantial differences in producers' costs for different brands of whisky. The difference in cost depends upon the way in which the distilled product is aged, the length of the ageing period and the proportion of aged whisky used in the product bottled for sale. If whiskies of different year's production are mixed or whisky is blended with neutral spirits, the product is subject to a rectification tax of 30 cents per proof gallon in addition to the cost of rectification. The principal costs involved in ageing whisky are the cost of the barrel or cooperage in which it is stored, storage charges, insurance, interest and property taxes. These costs are not reported by the Census and considerable variation is found in estimates, but before the war they probably amounted to at least 30 to 40 cents per proof gallon for a 4-year period. <sup>3/</sup> In addition to the outlay required, an important factor in ageing costs is the loss which occurs through leakage and evaporation. The loss varies depending upon storage conditions but usually is relatively heaviest in the first year and probably averages about 20 percent on 4-year ageing. <sup>4/</sup> Through this

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<sup>1/</sup> Department of Commerce, Census of Manufactures, 1939; Vol. II, Part I. Salaries and wages are those for manufacturing; total salaries and wages amounted to about 15 percent of the value of the product.

<sup>2/</sup> Analyst, February 8, 1939, p. 227. The cost estimate included overhead and was given on a bottle basis. It is assumed that the estimate was made for quart bottles.

<sup>3/</sup> TNEC, *op. cit.*, pp. 2483, 2517. The cost of a barrel was reported to be \$5-\$7, which would amount to 10 cents or more per proof gallon. Ageing costs were indicated to be 5 cents per gallon per year on original entry gauge.

<sup>4/</sup> The maximum statutory allowance for this period is 11 proof gallons per barrel which contains about 50 proof gallons. (Internal Revenue Code, Section 2901.)

loss the cost of distilling and storing is increased by 25 percent. Before the war the total cost of a proof gallon of whisky aged four years was probably at least 2-1/2 times as much as the cost of distilling a proof gallon. The difference would be relatively smaller after the addition of tax and bottling costs because these are practically the same for aged and unaged whisky.

The prices of distilled spirits that can be utilized for consumption without ageing would normally bear a close relationship to costs of production, but the price of aged liquors may differ substantially from the cost at which they were produced several years previously. For several years, following repeal, the price of aged whisky was high in relation to the current cost of production and ageing, but as aged stocks reached a relatively high level the price structure weakened and profits declined. The price-cost relationship has widened since the imposition of restrictions on production in 1948. However, present costs are very much higher than the prewar level.

#### B. Character of demand

Habits and social attitudes appear to be important factors determining the demand for distilled spirits. There may be a certain amount of substitution between distilled spirits and other alcoholic beverages based upon price considerations, but the type of satisfaction obtained from the different forms of alcoholic beverages suggests that it is rather limited. Distilled spirits also provide satisfaction essentially different from that supplied by non-alcoholic beverages, such as soft drinks. Income and price changes probably have an important bearing on the consumption of distilled spirits but it is difficult to determine their effect.

For most of the past generation the demand for distilled spirits has been affected by extreme changes in the legalization of sale and by war-induced abnormalities. For approximately 50 years prior to prohibition the total consumption of distilled spirits had increased but the increase appears to have been very largely a reflection of population growth. Comparison of per capita consumption for different periods of time is affected by changes in the proportion of the population living in jurisdictions where the sale of distilled spirits has been legal. These proportions changed substantially in the years immediately preceding prohibition but there appears to have been no significant change

in recent years. 1/ Since repeal consumption has increased almost continuously from year to year and the increases exceeded the growth in population. Some of the growth in the 1930's can probably be attributed to the readjustment of consumers to the legalization of beverage sales. To some consumers distilled spirits represented a new product. A large part of the increase is probably also attributable to the rise in the level of national income. In the years 1936-1941 the fluctuations in the consumption of distilled spirits were smaller than the fluctuations in disposable income. 2/

Evidence regarding the effect of price changes on the consumption of distilled spirits is limited. Adequate data on retail price changes are not available and since about 1942 consumption has been affected to some extent by limitations on supply. Most of the evidence appears to support the conclusion that within fairly wide limits a price change has less than a proportionate effect on the unit volume of sales. 3/ The price reductions in the late 1930's, which in some cases were accompanied by price wars, did not seem to result in increases in consumption proportionate to the decrease in prices. 4/ Although, as indicated above, demand and

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- 1/ Annual Reports of the Distilled Spirits Institute. A slight decrease since 1941 is indicated in the proportion of the population living in "wet" areas.
  - 2/ Based on Department of Commerce data on disposable income. Disposable income is the series used prior to the revision published in the Survey of Current Business for July 1947.
  - 3/ In the testimony given before the Temporary National Economic Committee one industry representative seemed to take the position that consumer purchases of whisky were largely independent of price. (Part 6, "Liquor Industry," p. 2519.)
  - 4/ There was a very drastic price war in New York City in the summer of 1940. As the population of the City is over 50 percent of the total for the State, any increase in consumer purchases because of the lower prices should have been reflected in State liquor tax receipts. An examination of these figures shows that there was an increase in wholesale (and presumably retail) purchases during the price war. However, after prices were stabilized there was such a large decrease that the total for the year was no higher than would have been expected if there had been no price war. Apparently, consumers added to their inventories during the price war with the result that their total expenditures for the year were less than they would have been in the absence of price reductions. The inference that lower prices did not affect demand is not conclusive, however, because the price changes were not effective for a long enough period to produce a change in habitual consumption patterns.



supply conditions have been abnormal for most of the war and postwar period, increases in the rate of tax and in prices exclusive of tax have been accompanied by a large increase in estimated consumer expenditures for distilled spirits. The increase in estimated expenditures has been relatively much larger than the increase in the level of income. For 1946 estimated consumer expenditures for distilled spirits amounted to 3.5 percent of disposable income compared with 2.2 percent in 1939. (Table 6) The increase in the ratio after 1941 may have been due in part to the shortages of other consumer goods. Consumer expenditures for distilled spirits in 1947 were appreciably below the 1946 level, but the ratio to disposable income is still much higher than in the prewar years.

*Price inelastic?  
Income elastic?*

#### C. Outlook for the industry

Indicated consumption of distilled spirits in 1947 was substantially below the 1946 level. Tax-paid withdrawals decreased by 19 percent. Some of the decline in tax-paid withdrawals, however, appears to have resulted from dealers' efforts to reduce inventories. Sales to consumers in monopoly States declined only about 8 percent while sales by wholesalers in license States, as indicated by tax collections, declined by 27 percent.<sup>1</sup> Since incomes were higher in 1947, the decrease was greater in relation to the level of income. The decline may have been due in part to the fact that in 1947 consumers bought more durable goods and had to pay higher prices for goods and services in general. Under more normal consumption patterns, purchases of distilled spirits, as in the past, are likely to rise and fall with changes in the level of income. Past experience does not indicate, however, whether there will be a significant long-term growth in consumption.

As consumption declined in 1947, stocks of whisky increased until production ceased under the grain-saving program. The supply of well-aged stocks, of course, has continued to decline because there was no significant production between 1942 and 1945. Stocks more than 4 years old amounted to 125 million proof gallons on June 30, 1947, a decrease of about 50 million gallons from June 30, 1946. (Table 7) The June 30, 1947 stocks of 4-year old whisky were at about the level of June 30, 1942. However, they will continue to decline until 1949 when the whisky produced in 1945 becomes 4 years old. The age distribution of whisky stocks apparently will be abnormal for some time in the future.

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<sup>1</sup>/ Distilled Spirits Institute, Statistical Reports.

Table 6

Disposable income, tax-paid withdrawals of distilled spirits  
and consumer expenditures for distilled spirits, 1935-1946

Calendar: year	Disposable income 1/		Tax-paid withdrawals		Consumer expenditures for distilled spirits 2/		
	Amount :(billions)	Percent change from preceding year	Amount :(Millions) of proof gallons	Percent change from preceding year	Amount :(millions) of dis- posable income	Percent of dis- tax-paid income	Per proof gallon 3/
1935	\$ 56.3	-	97.9	-	\$ 996	-	\$ 10.17
1936	65.2	15.8 %	129.8	32.6 %	1,304	2.0 %	10.05
1937	69.2	6.1	134.4	3.5	1,469	2.1	10.93
1938	62.9	- 9.1	125.0	- 7.0	1,396	2.2	11.17
1939	67.7	7.6	132.1	5.7	1,511	2.2	11.44
1940	72.9	7.7	141.5	7.1	1,675	2.3	11.84
1941	88.7	21.7	155.6	10.0	1,979	2.2	12.72
1942	110.6	24.7	161.6	3.9	2,683	2.4	16.60
1943	124.6	12.7	135.5	-16.2	3,202	2.6	23.63
1944	137.4	10.3	157.7	16.4	3,845	2.8	24.38
1945	139.7	1.7	177.7	12.7	4,400	3.1	24.76
1946	146.0	4.5	215.6	21.3	5,060	3.5	23.47

Treasury Department, Division of Tax Research

Source: Department of Commerce, press release of April 30, 1947 and Survey of Current Business, May 1942, April 1944, February 1946 and February 1947. Disposable income and consumer expenditures are from the series published prior to the revision given in Supplement to Survey of Current Business, July 1947. Tax-paid withdrawals: Annual Reports of the Commissioner of Internal Revenue.

- 1/ Disposable income represents income payments less personal taxes.
- 2/ Includes expenditures for drinks at bars and restaurants as well as package purchases.
- 3/ Computed on rounded figures.

Table 7

Stocks of whisky in internal revenue bonded warehouses  
as of June 30, 1946 and 1947

(In millions of tax gallons <sup>1/</sup>)

Year :	Season :	Stocks <sup>2/</sup>		Increase (+) or decrease (-)	
of :		1946 :	1947 :	from 1946 to 1947	
production:					
1938	Fall	.9	-	-	.9
1939	Spring	3.8	-	-	3.8
	Fall	5.3	1.6	-	3.7
1940	Spring	13.2	5.8	-	7.4
	Fall	21.0	8.5	-	12.5
1941	Spring	40.3	24.2	-	16.1
	Fall	47.9	32.2	-	15.7
1942	Spring	46.6	37.5	-	9.1
	Fall	17.5	14.3	-	3.2
1943	Spring	-	-	-	-
	Fall	-	-	-	-
1944	Spring	-	-	-	-
	Fall	13.0	12.3	-	.7
1945	Spring	25.3	24.9	-	.4
	Fall	70.0	60.3	-	.7
1946	Spring	69.2	68.8	-	.4
	Fall	-	59.5	+	59.5
1947	Spring	-	106.0	+	106.0
Total		374.1	464.8	+	90.7
Whisky over 4 years old		179.0	124.1	-	54.9

Treasury Department, Division of Tax Research

Source: Bureau of Internal Revenue, Alcohol Tax Unit, press  
release of October 21, 1947.

- <sup>1/</sup> A tax gallon for spirits of 100 proof or over is equivalent to the proof gallon. For spirits of less than 100 proof the tax gallon is equivalent to the wine gallon.
- <sup>2/</sup> Excludes a small amount produced in 1921 and prior years. Represents original entry gallons; losses not determined until withdrawal.



Production of whisky in the first 6 months of 1947 amounted to 107 million proof gallons, or at an annual rate nearly as high as the peak prewar year of production. Total stocks on June 30, 1947 had risen to 465 million proof gallons or within 50 million gallons of the prewar peak. Subsequent to June 30, production was at a relatively low level until October, the last month preceding the adoption of the grain-saving program. With present capacity and unlimited use of grain, distillers probably could produce in a few months as much whisky as they would desire to add to stocks in one season. However, high grain prices would have tended to limit production of whisky in the absence of grain restrictions. <sup>1/</sup>

After supplies of aged whisky have been built up under unlimited production, competition in the industry is likely to be intensive. Storage costs tend to force aged stocks on to the market when adequate production is in prospect. Continued improvement in the supply situation would bring prices more nearly in line with costs and might result in a period of price weakness and instability. A continuation of the concentration of sales in leading brands, however, would tend to reduce the extent of price competition at the distiller level. Price cutting at the wholesale and retail levels might again become serious unless pricing under fair trade laws prevented it.

#### V. Effects of the tax

##### A. On profits

All branches of the distilled spirits industry became increasingly profitable during the war. In 1945 net income after taxes of distillers, rectifiers and blenders filing corporation tax returns increased by 230 percent over 1939. (Table 8) Beginning with 1942 distillers' profits reflect the production of spirits for war purposes. This continued through August 1945. Profits of distillers reporting to the Securities and Exchange Commission in 1946 exceeded those for the war years. Total net profits before income taxes were nearly 10 times as high as in 1939. (Table 9) Net profits after income taxes were 39.5 percent of net worth compared with the prewar high of 18.9 percent in 1937. Liquor wholesalers and retail package stores filing corporation tax returns showed relatively larger increases in profits than distillers from 1939 to 1945. (Table 8)

Wartime controls tended to minimize the effect of the excise tax increases on the profits of the industry. After the production of beverage spirits was stopped in 1942, supplies remained

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<sup>1/</sup> In the latter part of 1947 corn and rye prices both rose to more than five times the 1939 level. (Department of Labor, Wholesale Prices; December and Year 1939, and "Average Wholesale Prices and Index Numbers of Individual Commodities," October 1947.)

Table 8

Number of corporation income tax returns, receipts and net income  
of distillers and distributors of distilled spirits, 1938-1945

(Money figures in millions)

Year	Returns with net income			Returns with no net income		
	Number of returns	Total compiled receipts	Net income after tax <sup>1/</sup>	Number of returns	Total compiled receipts	Deficit
<u>Distillers, rectifiers and blenders</u>						
1938	106	\$ 351.6	\$ 20.3	208	\$ 74.5	\$ 4.4
1939	94	346.8	18.2	154	85.5	5.0
1940	123	421.6	23.6	116	75.0	4.0
1941	152	659.8	29.0	69	22.3	.8
1942	167	874.6	36.8	61	15.2	1.4
1943	157	1,076.3	34.2	41	18.8	.7
1944	157	1,271.3	33.5	38	36.4	1.1
1945	147	1,755.9	46.8	60	63.4	3.1
<u>Wholesalers</u>						
1938	<sup>2/</sup>	<sup>2/</sup>	<sup>2/</sup>	<sup>2/</sup>	<sup>2/</sup>	<sup>2/</sup>
1939	<sup>2/</sup>	<sup>2/</sup>	<sup>2/</sup>	<sup>2/</sup>	<sup>2/</sup>	<sup>2/</sup>
1940	794	796.1	13.6	547	106.3	3.0
1941	908	1,131.0	20.0	417	85.9	1.6
1942	979	1,504.2	24.1	296	57.4	1.4
1943	1,014	1,592.3	33.8	153	22.3	.7
1944	932	2,092.2	41.8	165	39.6	.7
1945	956	2,490.4	45.0	238	92.7	3.5
<u>Retail package liquor stores</u>						
1938	547	37.2	.5	1,070	41.2	1.1
1939	654	45.0	.7	1,008	40.3	1.0
1940	733	56.3	.8	970	41.1	.9
1941	900	75.1	1.2	882	38.3	.9
1942	1,171	116.3	2.0	634	32.3	.6
1943	1,484	160.1	4.5	298	13.4	.3
1944	1,416	163.3	4.6	275	15.6	.3
1945	1,489	197.6	5.5	238	16.2	.4

Treasury Department, Division of Tax Research

Source: Statistics of Income, Part 2.

<sup>1/</sup> Net income after corporation income, excess profits and declared  
value excess profits taxes.

<sup>2/</sup> Not available.

Table 9

Net profits and rate of return on net worth of distillers reporting to Securities and Exchange Commission, 1936-1946 <sup>1/</sup>

Year	Net profits		Net profits as a percent of net worth <sup>2/</sup>	
	Before	After	Before	After
	: income taxes	: income taxes	: income taxes	: income taxes
	(Millions)			
1936	\$ 32.3	\$ 26.5	21.6 %	17.8 %
1937	38.6	31.0	23.5	18.9
1938	31.2	24.7	15.5	12.3
1939	28.4	22.9	13.3	10.7
1940 <sup>3/</sup>	32.8	24.6	15.3	11.4
1941	44.8	30.7	19.1	13.1
1942 <sup>4/</sup>	73.5	33.9	29.5	13.6
1943	113.7	39.4	44.0	15.2
1944	155.8	46.4	56.4	16.8
1945	220.9	64.7	67.4	19.7
1946	288.1 <sup>287.7</sup>	148.4 <sup>148.1</sup>	76.6	39.5
1947	240.3	123.1	44.9	29.1

Treasury Department, Division of Tax Research

Source: Securities and Exchange Commission, Survey of American Listed Corporations, "Data on Profits and Operations," Part I.

- <sup>1/</sup> Companies included for the whole period are: The American Distilling Company, Distillers Corporation - Seagrams Limited, Mohawk Liqueur Corporation, National Distillers Products Corporation, Old Poindexter Distillery, Incorporated, Schenley Distillers Corporation and Hiram Walker - Gooderham & Worts Limited. For the years 1937-1946: Brown-Forman Distillers Corporation and Merchants Distilling Corporation. For 1942-1943: Tom Moore Distillery Company. For 1945-1946: Philip Blum and Company, Incorporated, Glenmore Distilleries Company, Logansport Distilling Company, Incorporated, and Park and Tilford, Incorporated.
- <sup>2/</sup> Net worth as of the beginning of year. Includes preferred and common stock and surplus.
- <sup>3/</sup> Two registrants' statements were for eight-months' interim period. Net worth ratios adjusted to a full year.
- <sup>4/</sup> One registrant's statement for a nine-months' interim period. Net worth ratios adjusted to a full year.

short despite the additional production allowed for limited periods in 1944 and 1945. Although it appears that the price ceilings imposed were not fully effective, the extensive "black market" sales indicate that the ceilings did limit price increases on legal sales. <sup>1/</sup> The increases in tax, which were reflected in ceiling prices, undoubtedly held down consumption to some extent and thus were probably effective in limiting the scope of the black market.

The present Federal tax represents approximately 50 percent of the retail price of the most popular brands of distilled spirits. <sup>2/</sup> It is somewhat lower in relation to the higher priced products. As indicated in Section IV above, there is insufficient evidence to determine the extent to which the tax may reduce consumption. Conditions in the industry do not yet reflect a normal demand-supply relationship and the shortage of aged whisky stocks has prevented the industry from experiencing strong pressure on prices. After the termination of price ceilings, prices were increased somewhat, but later declined as production rose.

Thus far in the postwar period the industry appears to have avoided over-production. Moreover, with the continued high level of income dealers have been able to dispose of slow-moving stocks accumulated during the war. Under these conditions, profits may continue at a high level with the existing tax rate. However, a large increase in stocks or a substantial decline in the level of income would tend to stimulate price competition. With such a development the present rate of tax might have a substantial adverse effect on the profits of the industry. However, the postwar pattern of competition and price policy of the industry has not yet been clearly established, and until these factors are more fully known it is difficult to reach a conclusion on the probable effects of the tax on profits.

#### B. On business costs and competition

Taxable distilled spirits do not enter into the cost of other products to a very substantial extent. The principal business use is in the manufacture of high grade perfumes and certain food and medicinal

- <sup>1/</sup> United States Senate, Hearings before a Subcommittee of the Committee on the Judiciary, 78th Congress, 1st Session, Part 2, pp. 491-493. Prior to the issuance of Maximum Price Regulation No. 445, effective August 14, 1943, higher ceiling prices were obtained by introducing new brands. (Part 2, pp. 426-439.)
- <sup>2/</sup> The ratio will differ with the amount of taxes imposed by State and local governments, or the amount of the mark-up made by State monopolies. For information on State taxes, see Treasury Department study "Federal-State Tax Coordination," July 1947.

products. The tax on the distilled spirits used for these purposes provides for a drawback of \$6 per proof gallon. The net tax of \$3 per proof gallon probably is not an important factor in the competitive position of the products made from tax-paid distilled spirits.

The tax on distilled spirits is higher in relation to the price of the product than the taxes on fermented malt liquors and wines. Although the latter afford a closely allied form of consumer satisfaction, it is doubtful whether the present differences in tax are sufficient to cause an appreciable amount of substitution of the lower taxed products for distilled spirits. It would appear that social considerations affecting the choice of alcoholic liquors are so strong that a much larger tax differential would be necessary to produce a substantial change in consumption habits.

The flat specific tax on distilled spirits tends to give more expensive products a competitive advantage. <sup>1/</sup> For example, although at the distiller level one product may sell at half the price of another before tax, the addition of tax plus wholesale and retail mark-ups on cost including tax would raise the price of the cheaper product at the retail level to approximately 75 percent of the more expensive product. This tends to affect adversely distillers concentrating on low priced lines. The amount of tax may be reduced by lowering the proof of the product within certain limits, but this process increases bottling, packaging and distribution costs in relation to the price of the product per unit of proof. There is no clear-cut division in the industry between producers of the lower and higher priced products but some firms do tend to concentrate on either blends or straight whisky products.

By increasing the capital requirements of wholesalers and retailers the tax tends to limit competition at these levels. However, the State or local restrictions imposed on the number of liquor licensees may be a much more important factor. Where these restrictions effectively limit the number of outlets, the additional capital requirement resulting from the tax is not likely to be an important factor in reducing competition.

### C. On consumers

Reported data on consumer expenditures for distilled spirits in relation to size of consumer income do not appear to be sufficiently complete to afford a reliable indication of the distribution of the

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<sup>1/</sup> An official of one of the largest concerns recently pointed out that 65 percent of the whisky sales are in the top price brackets. Under the present tax rate, the price differential between advertised brands and lower-priced brands is only about 10 percent according to this official. (Journal of Commerce, New York, September 11, 1947.)



tax burden. <sup>1/</sup> However, consumers purchasing the higher-priced products tend to pay less tax in relation to their expenditures because the tax varies only with the quantity purchased. The upper income groups probably purchase relatively more of the higher-priced packaged goods and distilled spirits sold by the drink. This would tend to make the tax regressive.

Distilled spirits are not included in the Consumers' Price Index of the Bureau of Labor Statistics.

Before the war, the consumption of distilled spirits fluctuated less than disposable income. Compared with prewar levels consumption has risen less than half as much as disposable income. From this experience it is not possible to determine what the relationship will be under more normal conditions. However, it appears that the tax would generally have the effect of withdrawing relatively more purchasing power from the income stream in periods of low business activity than in periods of high business activity.

#### VI. Administration and compliance

Because of the ease with which distilled spirits can be produced and the high value of the product in relation to its bulk, the law provides for close supervision over the production and distribution of the product in order to assure payment of the proper tax. <sup>2/</sup> The detailed records and reports required of distillers and others and the personnel engaged in the supervision of operations involve substantial costs for the industry and the Government. Part of this cost relates to the production and use of industrial alcohol, which is not subject to tax. In addition to the administrative cost of supervising operations in authorized plants, the Government normally has a large enforcement personnel engaged in suppressing illicit production and distribution of distilled spirits. This work is conducted in close cooperation with State enforcement agencies. The total cost of collection and enforcement of the Federal taxes on all alcoholic beverages is less than one percent of the revenue from this source. However, a relatively higher proportion of the enforcement cost is attributable to suppression of the illicit traffic in distilled spirits than in other alcoholic beverages.

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- <sup>1/</sup> The data collected in Family Spending and Saving in Wartime (Department of Labor, Bulletin No. 822, 1945, p. 78) indicate that consumers understated their expenditures for distilled spirits by perhaps as much as two-thirds. Expenditures of income groups under \$5,000, as reported, rose proportionately as the size of family income increased.
- <sup>2/</sup> The Federal Alcohol Administration Act requires all producers (other than brewers), importers and wholesale distributors of alcoholic beverages to secure basic permits. The number of such permits outstanding on June 30, 1946 was 16,094. (Annual Report of the Commissioner of Internal Revenue, fiscal year ended June 30, 1946, p. 44.)



When the rate of tax on distilled spirits was increased during the war it was believed that wartime limitations on the use of materials required for illicit operations would prevent an expansion of "bootlegging". Experience has shown that such operations were confined to a relatively low level during and since the war. Sugar rationing was an important factor confronting illicit operators because it afforded enforcement officers a close check on sugar users. Government controls over industrial use and inventories of sugar, which were continued after consumer rationing ended, were terminated effective October 1947. Since that time the Bureau of Internal Revenue has been confronted with an increase in the use of sugar in illicit distilling, but it is not yet clear how extensive this will become. For checking the use of this material, the Bureau has reinstated its own program authorized by the law and which was in effect prior to sugar rationing. <sup>1/</sup> However, this program is much more restricted in scope than the controls in force under sugar rationing.

Another factor that appears to have a significant effect on illicit operations is the level of income and employment. The high-employment level of income which has prevailed for a number of years has tended to curtail evasion of the tax on distilled spirits. Unemployment tends to stimulate such activities through the willingness and low cost at which labor can be obtained for such purposes. At the same time the reduced income of consumers causes them to seek a lower priced product and thus furnish an expanded market for illicit production.

There is no way of determining the extent to which illicit operations would be carried on under different rates of tax. Between 1934 and 1940 there was little change in the rate. During this period considerable progress was made in dispersing organized operations which had developed during prohibition. These efforts reduced illicit production in northern States to relatively low levels, but the suppression of smaller scale operations in the South proved to be more difficult. The increase in tax of \$.75 per proof gallon in 1940 resulted in some increase in illicit activities which was largely offset by intensified enforcement efforts. Subsequent increases in rates were followed by large increases in employment and wartime restrictions. The future level of illicit operations will depend to a substantial extent on how favorable factors other than the rate of tax may be. Under conditions which prevailed during the years just before the war the present rate would probably stimulate a considerable increase in the production and purchase of untaxed spirits. Intensified enforcement efforts could offset this to a substantial degree but probably not fully without some reduction in the tax rate.

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<sup>1/</sup> Regulations No. 17.

While tax reduction would be likely to curtail illicit production, it would not necessarily result in increased revenue. Complete elimination of present illicit production probably would offset only a relatively small reduction in the present rate of tax. The level of the tax rate, however, is not only a question of revenue considerations. Widespread liquor law violations would have undesirable social effects.

#### VII. Technical problems

The principal technical problems that arise under this tax are:

1. Whether floor stocks taxes should be imposed or refunds made on floor stocks if the tax rate is changed.
2. Whether the present provision for a drawback on distilled spirits used in non-beverage products should be modified.

##### A. Floor stocks taxes and refunds

Increases in the rate of tax on distilled spirits beginning with the Revenue Act of October 3, 1917 have been accompanied by taxes on floor stocks. Since the product is not highly perishable such taxes appear to be necessary, because there would otherwise be a strong tendency to accumulate tax-paid inventories at the lower rate. <sup>1/</sup> In view of the large stocks normally carried in bond during the ageing process, producers and dealers would have an opportunity to build up tax-paid inventories to such an extent that the increased tax rate might be applicable to only a small portion of sales to consumers for a considerable period of time. The necessity for financing payment of the tax would be the principal deterrent to such accumulations. In addition to defeating the objective of the Government in raising the tax, failure to levy a floor stocks tax would benefit those who have the resources to take advantage of the opportunity.

There has been no experience with a reduction in the tax rate on distilled spirits since 1869, except during the period when the sale of distilled spirits for beverage purposes was prohibited. <sup>2/</sup> In

<sup>1/</sup> According to the report of the Industrial Commission in 1900 tax-paid withdrawals of spirits in anticipation of the increase in tax of 20 cents per proof gallon in 1894 were equal to two or three years' supply. (House of Representatives, Preliminary Report on Trusts and Industrial Combinations, supra, Part I, p. 91 and Part II, p. 247.)

<sup>2/</sup> Refunds were granted on certain stocks withdrawn at the beverage tax rate prior to July 1, 1919, the effective date of wartime prohibition. (House Report No. 1124 to accompany H. R. 10528, 68th Congress, 2nd Session.)

connection with the provision for reduction in the War Tax Rate from \$9 to \$6 per proof gallon the Congress, in the Revenue Act of 1945, provided for refunds on floor stocks subject to certain conditions. 1/ Reduction in the tax by any other amount would presumably raise the question of whether this provision should be amended.

The possibility that the industry would experience substantial losses in the case of a tax reduction without provision for refund would depend upon the amount of the tax reduction, the level of tax-paid stocks in relation to sales and the conditions of demand and supply at the time of the reduction. A relatively small reduction without provision for refunds would probably not disturb the industry appreciably unless it were in a very unfavorable position. A reduction of 50 cents per proof gallon would amount to only 8 cents to 10 cents per fifth, depending upon the proof of the product. At present prices this would represent 3 percent or less of the retail price on package sales. It would be a much smaller percentage of the price on sales by-the-drink and would probably be insufficient to result in a price adjustment on such sales. However, stocks of tax-paid spirits normally held by the industry are so large in relation to sales that a substantial reduction in tax without provision for refunds might result in large losses and disruption of normal business activity. The size of stocks appears to vary considerably with the season of the year as well as with the volume of business. Floor stocks returns filed under the Revenue Acts of 1940-1943 indicate that stocks at the seasonal peak prior to the Christmas Holidays amounted to about one-third of the year's sales. (Table 10) Most of the stocks are held by retailers and wholesalers. In 1942 and 1944 the proportion held by retailers increased compared with the earlier years. Retailers on the average appear to carry stocks equal to from 1-1/2 to more than 2 months' sales. Those carrying an unusually high proportion of slow-moving stocks would have relatively larger inventories.

Although prices would tend to fall after a tax reduction, the change might take place slowly or rapidly depending upon market conditions. At the present time the relationship between demand and supply is relatively favorable and under these conditions it might be several months before a tax reduction would be reflected in lower prices to consumers. If a refund were granted under these conditions special provisions would be necessary to assure consumers the benefit of the reduction and to prevent undue windfalls to holders of tax-paid stocks. 2/

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1/ Revenue Act of 1945, Section 302. The refund provision was made permanent by the Excise Tax Act of 1947.

2/ A provision of this nature is included in Section 1656(b) of the Internal Revenue Code, relating to refunds on alcoholic beverages.

Table 10

Floor stocks of tax-paid distilled spirits in possession of producers and distributors on dates of imposition of floor stocks taxes under Revenue Acts of 1940-1943

(Amounts in million proof gallons)

	: July 1, : 1940	: October 1, : 1941	: November 1, : 1942	: April 1, : 1944
Stocks:				
Retail dealers	16.0	21.8	30.1	23.3
Wholesale dealers, including importers	18.9	24.0	19.3	17.4
Distillers, rectifiers, etc.	3.6	5.5	3.1	3.7
Other <u>1/</u>	.2	.3	1.5	.2
Total	38.7	51.6	54.0	44.6
Percent of total held by:				
Retail dealers	41.3	42.2	55.7	52.2
Wholesale dealers, including importers	48.8	46.5	35.7	39.0
Distillers, rectifiers, etc.	9.3	10.7	5.7	8.3
Other <u>1/</u>	.5	.6	2.8	.4
Total	100.0	100.0	100.0	100.0
Tax-paid withdrawals <u>2/</u>	141.5	155.6	161.6	157.8
Stocks as a percent of tax-paid withdrawals:				
Total	27.4	33.2	33.4	28.3
Retail dealers	11.3	14.0	18.6	14.8
Wholesale dealers, including importers	13.4	15.4	11.9	11.0
Distillers, rectifiers, etc.	2.8 <u>3/</u>	3.9 <u>3/</u>	2.1 <u>3/</u>	3.2 <u>3/</u>
Other <u>1/</u>	.2 <u>3/</u>	.2 <u>3/</u>	1.0 <u>3/</u>	.1 <u>3/</u>

Treasury Department, Division of Tax Research

Source: Unpublished data of the Alcohol Tax Unit, Bureau of Internal Revenue.

1/ Manufacturers of flavoring extracts, foods, medicines, etc.

2/ Total domestic and imported products for calendar year in which floor stocks tax imposed.

3/ As percent of domestic withdrawals only.

The effect which a tax reduction without refunds would have upon the industry should be weighed against the administrative problems involved. The total number of producers, wholesalers, and retail dealers handling distilled spirits is over 250,000. No regular reports are now obtained from retailers which represent most of the total number involved. The securing of returns, verifying their accuracy and the payment of claims would represent a major undertaking for the Bureau of Internal Revenue. It would be very difficult to avoid payment of fraudulent claims, since returns could not be investigated for a substantial period subsequent to the date of filing without the recruitment of a large force especially for this purpose.

B. Drawback on distilled spirits used in non-beverage products

Since the Revenue Act of 1942 a drawback has been allowed on distilled spirits used in the manufacture of certain products, principally food flavorings and medicinal preparations, where the user meets conditions prescribed by law and regulations. In order to qualify for a drawback the users must pay a special tax graduated according to the amount of spirits used. Since the minimum tax is \$25 and the drawback allowable at present is \$6 per proof gallon, manufacturers using not more than 4.25 proof gallons would gain no advantage from qualifying for a drawback. Where a user does qualify for a drawback additional capital is tied up pending receipt of the refund, and special records must be kept. Smaller users feel that the present law is discriminatory and have suggested that it be modified to provide for securing distilled spirits on the payment of a nominal tax at the time the spirits are withdrawn for use. 1/

If a lower tax is to be provided on distilled spirits used in medicinal preparations and food products, the drawback system is considered essential to prevent the diversion of the distilled spirits to beverage use. 2/ Experience has indicated that very rigid controls are necessary to prevent such diversion. The drawback system minimizes the possibility of illegal sale of beverage spirits by requiring payment of the full beverage tax rate in advance and that the claimant for a drawback assume the burden of proving proper use of the taxable spirits.

1/ Hearings before the Committee on Ways and Means on Proposed Revisions of the Internal Revenue Code, 80th Congress, 1st Session, p. 407 et seq.

2/ Denatured alcohol, which is tax free, may be used in the manufacture of medicinal preparations for external use.

The risk of diversion is much greater where the beverage spirits can be obtained initially at a reduced rate of tax. The special tax serves to limit the number of users who might otherwise attempt to obtain spirits at the reduced rate to be sold for beverage purposes. <sup>1/</sup> Without such a tax the Bureau of Internal Revenue would have to process many more claims for refund and there would be a substantial increase in the administrative cost of the drawback system.

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<sup>1/</sup> During the fiscal year 1946 the number of special tax stamps purchased was 1,291. (Annual Report of the Commissioner of Internal Revenue, Fiscal Year ended June 30, 1946, p. 144.) About 5-1/2 million proof gallons were used by manufacturers paying the special tax. (Unpublished data of the Bureau of Internal Revenue.)



PART II - Excise Tax on Fermented Malt Liquors 1/

I. Description of the tax

The tax is applicable to fermented malt beverages of domestic production containing one-half of one percent or more of alcohol by volume. Imported fermented malt liquors are not subject to excise tax but are subject to the tariff duty. 2/ The chief products included in the tax base are beer, lager beer, porter, and ale.

Payment of tax is required of the brewer at the time the product is withdrawn from the brewery or the brewer's warehouse. The tax is paid by purchasing stamps to be affixed to the packages or cancelled in a manner approved by the Commissioner, prior to withdrawal.

Exemptions from the tax are provided for:

1. Withdrawals for export.
2. Withdrawals for production of cereal beverages containing less than one-half of one percent alcohol.
3. Consumption on brewery premises.

II. Changes in the tax since 1913

A tax on fermented malt liquors has been in effect continuously since 1862. During the prohibition period the rate enacted in 1919 remained in effect. The tax rates and effective dates of changes since 1913 are shown below:

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1/ This analysis is limited to the gallonage tax. In addition to this tax there are special taxes on brewers and dealers in malt liquor. (See Appendix, p. 101.)

2/ The duty as established by reciprocal trade agreements is \$7.75 per barrel of 31 gallons.

Changes in tax rates since 1913

(Per barrel of 31 gallons)

Revenue Act	Effective date	Rate	Revenue Act	Effective date	Rate
In effect					
	Dec. 31, 1913	\$ 1.00	1933 a/	Apr. 7	\$ 5.00
1914	Oct. 22	1.50	1934 b/	Jan. 12	5.00
1917	Oct. 3	3.00	1940	July 1	6.00
1918	Feb. 24, 1919	6.00	1942	Nov. 1	7.00
			1943	Apr. 1, 1944	8.00

a/ Act of March 22, 1933, (Public No. 3, 73d Congress, 1st Session) which legalized the sale of beer containing not more than 3.2 percent alcohol by weight. The tax on beer of greater alcoholic content was not reduced until the Liquor Taxing Act of 1934.

b/ Liquor Taxing Act of 1934.

III. Revenue collections, 1936 - 1947

The tax on beer is the third most important source of excise revenue, being exceeded only by collections from the excises on distilled spirits and cigarettes. In the fiscal year 1947 collections from the tax on beer equalled 39 percent of the excise tax collected on distilled spirits.

Collections, fiscal years 1936 - 1947

(In millions)

Fiscal year	Collections	Fiscal year	Collections
1936	\$ 244.6	1942	\$ 366.2
1937	277.5	1943	455.6
1938	269.3	1944	559.2
1939	259.7	1945	638.7
1940	264.6	1946	650.8
1941	316.7	1947	661.4

#### IV. Economic background of the industry

##### A. Character of supply

Between 1920 and 1933 production of fermented malt liquors was confined to providing material for conversion to cereal beverages containing less than one-half percent alcohol, known as "near beer." When the sale of beer was legalized in 1933, <sup>1/</sup> the industry was re-established largely on the basis of plant facilities which existed prior to prohibition, although some new breweries were constructed.

After the industry became re-established, the number of breweries operated was only about one-half as large as the number operated just prior to World War I. <sup>2/</sup> The maximum number of breweries operated after 1933 was 750 in the fiscal year 1935, following which the number declined steadily to about 450 in 1946. (Table 1) Apparently over-optimistic estimates of the market for beer had led to the establishment of an excessive number of breweries. About one-half of the decline in number since 1935 occurred during the war years.

Although the number of breweries has declined substantially, there is still a fairly low degree of concentration of production in the industry. Perhaps the major reason for the lack of concentration is the importance of transportation costs in relation to the value of the product. <sup>3/</sup> Beer is produced in all but ten States. About 80 percent of the breweries are located in thirteen States, and these breweries accounted for 86 percent of total production in the fiscal year 1947. (Table 2) For the year 1941, a comparison of production and consumption by States indicates, however, that production exceeded consumption to a substantial extent in only a few States. (Table 3)

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<sup>1/</sup> From April 7, 1933, to the ratification of the Twenty-first Amendment the sale of beer containing not more than 3.2 percent alcohol by weight was legalized. (Public No. 3, 73d Cong., 1st Sess.)

<sup>2/</sup> The number of breweries operated in 1914 was 1,392. (Treasury Department, Bureau of Industrial Alcohol, Statistics Concerning Intoxicating Liquors, December 1933, p. 86.) There was a significant decline in the number of breweries after 1908 but some of this decline may have been associated with the spread of prohibition in individual States.

<sup>3/</sup> For example, the rate on minimum carload shipments is 36 cents per 100 pounds between Chicago and St. Louis, 70 cents between Chicago and New York and 84 cents between Chicago and Denver. The transportation cost, including reshipment of the barrel, would be about \$1.30 per barrel more between Chicago and New York than between Chicago and St. Louis (assuming steel barrels, weighing about 60 pounds). The difference in cost of bottle shipments would be over \$2 per case because the bottles are heavier than the contents.

Table 1

Number of breweries operated, production, and withdrawals  
of fermented malt liquors, fiscal years 1934-1947

(Millions of barrels)

Fiscal year	: Number : of : breweries : operated :	: Production :	Withdrawals 1/			
			: Total :	Tax paid		
				: Total :	: For bottling:	: For kegs, etc.
1934	714	37.7	32.7	32.3	8.0	24.3
1935	750	45.2	42.8	42.2	11.0	31.3
1936	732	51.8	49.3	48.8	16.3	32.4
1937	720	58.7	55.9	55.4	22.9	32.5
1938	696	56.3	54.4	53.9	24.3	29.7
1939	653	53.9	52.2	51.8	24.7	27.1
1940	611	54.9	53.4	53.0	27.0	26.0
1941	574	55.2	53.3	52.8	27.8	25.0
1942	530	63.7	61.7	60.9	35.3	25.6
1943	497	71.0	69.3	68.6	41.1	27.5
1944	469	81.7	78.6	77.0	47.2	29.7
1945	468	86.6	83.6	79.6	50.4	29.2
1946	471	85.0	83.6	81.3	53.3	28.0
1947	465	87.9	83.6	82.6	54.9	27.8

Treasury Department, Division of Tax Research

Source: Annual Reports of the Commissioner of Internal Revenue.

1/ The difference between total withdrawals and tax-paid withdrawals represents tax-free withdrawals and tax-free beer consumed on brewery premises.

Table 2

Fermented malt liquors: Number of breweries and production  
grouped according to the number of breweries operated  
in a State, fiscal year 1947

Size of class: (number of breweries in State)	Number of States	Number of breweries <u>1/</u>	Production: (in thousands of barrels)	Percentage distribution	
				Breweries	Production
0	10	0	0	-	-
1	6	6	638	1.3 %	.7 %
2	7	14	1,947	3.0	2.2
3 - 5	7	27	2,225	5.8	2.5
6 - 10	7	46	7,446	9.9	8.5
11 - 20	6	83	21,728	17.8	24.7
21 - 50	5	166	34,991	35.7	39.8
Over 50	2	123	18,881	26.5	21.5
Total	50 <u>2/</u>	465	87,857	100.0	100.0

Treasury Department, Division of Tax Research

Source: Annual Report of the Commissioner of Internal Revenue.

1/ Represents number operated during any part of the year.

2/ Includes District of Columbia and Hawaii.

Table 3

Production and consumption of fermented  
malt liquors by regions and States, 1941

(Amounts in thousands of barrels)

Region and State	: Production	: Consumption	: Surplus or deficit (-)	: Production as a percent of consumption
<u>Northeast</u>	23,799	23,061	738	103.2 %
Maine	-	271	- 271	-
New Hampshire	35	228	- 193	15.4
Vermont	-	124	- 124	-
Massachusetts	1,357	2,098	- 742	64.7
Rhode Island	691	473	218	146.1
Connecticut	347	1,083	- 736	32.0
Pennsylvania	6,791 x	5,976	815	113.6
New York	9,062 x	8,520	542	106.4
New Jersey	4,079 x	2,823	1,256	144.5
Delaware	55	125	- 70	44.0
Maryland	1,382 x	1,340	42	103.1
<u>North Central</u>	27,601	20,217	7,384	136.5
Ohio	4,167	3,660	506	113.9
Indiana	1,997	1,246	750	160.3
Illinois	3,930	4,708	- 778	83.5
Michigan	3,100	3,587	- 487	86.4
Wisconsin	6,346	2,201	4,145	288.3
Minnesota	2,178	1,354	824	160.9
Iowa	123	837	- 715	14.7
Missouri	5,266	1,583	3,683	332.7
North Dakota	-	149	- 149	-
South Dakota	3	128	- 125	2.3
Nebraska	491	433	58	113.4
Kansas	-	331	- 331	-
<u>South</u>	4,071	8,521	- 4,450	47.8
District of Columbia	161	421	- 260	38.2
Virginia	139	898	- 759	15.5
West Virginia	27	646	- 619	4.2
North Carolina	111	458	- 348	24.2

(Continued on next page)



Table 3 - concluded

Production and consumption of fermented  
malt liquors by regions and States, 1941

(Amounts in thousands of barrels)

Region and State	Production	Consumption	Surplus or deficit (-)	Production as a percent of consumption
<u>South (continued)</u>				
South Carolina	-	283	- 283	-
Georgia	76	262	- 186	29.0
Florida	259	600	- 341	43.2
Kentucky	1,053	823	230	127.9
Tennessee	195	513	- 318	38.0
Alabama	-	302	- 302	-
Mississippi	-	177	- 177	-
Arkansas	-	221	- 221	-
Louisiana	1,082	567	415	162.2
Oklahoma	50	349	- 299	14.3
Texas	918	1,901	- 983	48.3
<u>West</u>	4,446	5,126	- 680	86.7
Montana	186	260	- 74	71.5
Idaho	36	140	- 104	25.7
Wyoming	53	77	- 24	68.8
Colorado	307	370	- 63	83.0
New Mexico	-	73	- 73	-
Arizona	19	144	- 126	13.2
Utah	123	145	- 22	84.8
Nevada	15	67	- 52	22.4
Washington	941	736	205	127.9
Oregon	164	431	- 267	38.1
California	2,602	2,683	- 82	97.0
Total United States	59,917	56,925	2,992	105.3

Treasury Department, Division of Tax Research

Source: U. S. Tariff Commission, "Fermented Malt Liquors, Possibilities of Conserving Rail Transportation," March 1943.

1/ Differences will not necessarily add to totals due to rounding.

For the fourteen States having excess production, however, the excess amounted to only about 20 percent of the total production for the country in that year.

Some increase in concentration appears to have occurred in the industry since 1935. For that year it was reported that the four largest companies, representing six plants, produced only about 12 percent of the total value of malt liquors. <sup>1/</sup> The eight largest companies, with eleven plants, produced about 18 percent of the total value. In the fiscal year 1946 the nine largest breweries, each producing over 1 million barrels, accounted for about 21 percent of the total production. Breweries producing less than 100,000 barrels in 1946 accounted for 14 percent of the output. The remainder of the production, or nearly two-thirds of the total, was produced in breweries of intermediate size. (Table 4) The largest breweries are generally those whose production is distributed on a national basis, although some breweries that do not distribute nationally are comparable with the national brewers. The concentration of production on the basis of company control probably is somewhat higher than is shown for individual breweries, but it does not appear that multiple ownership of breweries by individual companies is very extensive. <sup>2/</sup>

Beer production includes some specialized products such as lager beer and ale but these do not constitute a large proportion of the total. There is also considerable variation in the alcoholic content of the product of different producers. The alcoholic content of beer ranges from around 2 percent to a maximum of 5 percent by volume, the average before the war being about 4-1/2 percent. <sup>3/</sup> On the bulk of the production, therefore, the differences in the character of the product are those associated with the taste or other features attributed to the products of individual brewers.

Competition in the industry differs to a considerable extent from one geographic area to another. There are a limited number of brands of beer distributed on a national basis, but these brands do not all compete in all markets. Because of the transportation costs there are numerous market areas, with a certain amount of overlapping.

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<sup>1/</sup> National Resources Committee, The Structure of the American Economy, Part I, "Basic Characteristics," June 1939, pp. 250-251.

<sup>2/</sup> The number of corporation tax returns filed in the brewing industry is about the same as the number of plants reported by the Alcohol Tax Unit.

<sup>3/</sup> An article in the American Brewer, November 1947, p. 21, presents data showing an average alcoholic content for beer of 4.6 percent in the years 1936-1939. The average declined to a low 4.0 percent in 1946 but rose to 4.3 percent in the first 6 months of 1947. The alcoholic content runs higher for ale than for beer.

Table 4

Number of breweries and production of fermented malt  
liquors by size of brewery, fiscal year 1946 <sup>1/</sup>

Production : size-class :		Breweries :		Total production	
(Thousands of barrels) :	Number	Percent of total	Barrels (In millions):	Percent of total	% of total
0 - 100	253	55.4 %	11.7	13.8 %	27. %
100 - 200	89	19.5	12.5	14.7	25
200 - 400	65	14.2	19.4	22.9	25 15
400 - 600	25	5.5	12.1	14.3	1
600 - 1,000	16	3.5	11.6	13.7	10
Over 1,000	9	2.0	17.5	20.6	17
Total	457	100.0	84.8	100.0	100

Treasury Department, Division of Tax Research

Source: Bureau of Internal Revenue, Alcohol Tax Unit, unpublished data.

<sup>1/</sup> Excludes breweries in part-time operation, which had a total output of 174,000 barrels.

In each market area there is competition both between the national brands and between these brands and the products of breweries in the local or regional market areas. In some market areas competition is very strong while in others it is limited. However, in most market areas the number of brewers represented probably is not large and there may be a fairly high concentration of sales among a few brewers. 1/ Comparison of production and consumption for different areas in 1941 showed that production exceeded consumption by about 30 percent in the north central States whereas consumption exceeded production by more than 50 percent in the southern States and parts of the Southwest. (Table 3) In general price competition is stronger in the surplus areas, and as the result of this competition producers in these areas tend to seek outlets in the deficit areas. In addition to the competition from national brands, breweries in a local market area may experience competition from production of adjacent market areas. A study made in 1941 revealed a substantial amount of inter-area shipment of beer. 2/

The national brands generally do not compete on a price basis. These brands are sometimes referred to as premium brands, for which producers attempt to establish consumer preference by intensive advertising. The locally produced products compete largely on a price basis although there has been a growing effort to establish brand preference by brewers not having national distribution. The increase in the proportion of beer sold in bottles and cans has made it possible for producers to place increasing emphasis on brand preference. The proportion of beer bottled increased from about 25 percent in the fiscal years 1934-1936 to about 50 percent in the fiscal year 1940. The proportion increased further during the war and amounted to about two-thirds in the fiscal year 1947. (Table 1) However, the concentration of sales in leading brands apparently has not reached the point where competition is based principally upon the characteristics of the products. In markets where inter-area shipment of beer is feasible there was keen price competition before the war. The high ratio of fixed investment of breweries to sales tends to encourage full utilization of capacity, 3/ and the pressure for increased outlets tends to induce price competition.

1/ For example, the products of only about 20 breweries are distributed in the District of Columbia, and five have the bulk of the business.

2/ U. S. Tariff Commission, "Fermented Malt Liquors, Possibilities of Conserving Rail Transportation," March 1943.

3/ For 1943 fixed assets represented two-thirds of the total assets of breweries filing balance sheets with corporation income tax returns and amounted to about one-third of sales (Statistics of Income, Part 2).

The method of distribution of beer differs depending upon the location of the brewers. The brewers whose products are distributed on a national basis usually sell to wholesalers while the local brewers usually sell direct to retailers. <sup>1/</sup> Some retail dealers serve only one brand of draught beer but most of them carry a number of bottled brands. The increasing importance of sales of packaged beer has resulted in greater potential competition at the retail level where sales are made through many outlets other than specialized liquor dealers, such as chain stores and super markets. Prior to the war some efforts were made to establish resale price maintenance for fermented liquors, but the experience was not very widespread and appears not to have been successful. <sup>2/</sup> Resale price agreement in a given market encounters the possibility that outside brewers will enter the market. In general it appears that at least in metropolitan areas there has been considerable competition in the industry at the distributing as well as the producing level.

The latest published information on the cost of producing beer is for 1939. For that year the value of beer produced was approximately \$500 million (exclusive of Federal excise tax), an average of a little less than \$10 per barrel. <sup>3/</sup> The cost of grain and other cereals used amounted to 17 percent of the value of products and manufacturing wages and salaries represented 14 percent. There appears to be a substantial difference between the cost of beer distributed in barrels for sale by the glass and that produced for sale in bottles or cans. On the basis of selected brands the price of beer sold by the case in 1939 was about twice the price of beer in barrels, for equivalent amounts f.o.b. the brewery and exclusive of Federal excise tax. <sup>4/</sup> Ceiling prices were imposed on beer during the war. Although the cost of materials and labor increased, restrictions on the use of grain resulted in less materials being used per unit of output. The industry was given substantial price relief in 1946 and prices appear to have increased somewhat after the termination of price ceilings. <sup>4/</sup> Moreover, breweries increased the proportion of output sold in packaged form, which according to reports is more profitable than bulk sales. <sup>5/</sup>

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<sup>1/</sup> Federal Trade Commission, Resale Price Maintenance, 1945, pp. 415, 416.

<sup>2/</sup> Ibid., pp. 416-440

<sup>3/</sup> Department of Commerce, Census of Manufactures: 1939, Vol. II, Part 1. Although the cost of containers is reported as being included, it is not clear whether the value reflects the case price for bottled beer or the bulk price.

<sup>4/</sup> Unpublished information of the Bureau of Labor Statistics.

<sup>5/</sup> Standard and Poor's Industry Surveys, "Brewing and Distilling," March 7, 1947.

## B. Character of demand

Widespread consumption of beer in the United States followed the Civil War and appears to have been associated with the growth of particular national groups in the population. The pattern of beer consumption at present is probably less dependent than formerly on the national origins of the population. However, social attitudes and consumer tastes are important basic factors in the demand for beer. These factors influence the decisions of consumers with respect to whether they will use alcoholic beverages in any form and their preference for one type over another. There is a considerable area of possible substitution of other drinks for beer, through the use of non-alcoholic beverages or other alcoholic beverages. Relative prices presumably affect the choice of some consumers, but it is difficult to arrive at a tangible basis for comparison of prices. On the basis of alcoholic content, the price of inexpensive types of beer is probably about the same as for wine in eastern markets and somewhat less than for distilled spirits, but it is doubtful whether consumer comparisons are influenced to a large extent by this consideration.

From the resumption of legal sale of beer in 1933 to the outbreak of World War II, aggregate consumption of beer remained below the peak year reached in the pre-prohibition period; per capita consumption was only a little more than half as high as in the years just preceding World War I. <sup>1/</sup> This would indicate that some change in consumer habits had occurred during prohibition. During this period a large increase in consumption of soft drinks had taken place. Beer consumption increased very little after 1936 until the beginning of the war. By 1945, however, consumption was more than 50 percent above the highest prewar year 1937. (Table 5) As a result of this increase per capita consumption again approached the pre-prohibition peak. It seems likely that a substantial part of the increase in consumption over the prewar level resulted from the rise in the level

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<sup>1/</sup> Statistical Abstract, 1946, p. 861. In the years 1911-1914 average consumption was slightly more than 20 gallons per capita and in the fiscal years 1937-1940 about 13 gallons per capita. It should be noted that during the earlier period prohibition existed in nine States. Per capita consumption data after 1914 were affected by a rapid increase in State prohibition.



Table 5

Disposable income, tax-paid withdrawals of beer and consumer expenditures for beer, 1934-1946

Calendar: year	Disposable income <sup>1/</sup>		Tax-paid withdrawals of beer		Consumer expenditures for beer		
	Amount :(billions)	Percent change from preceding year	Amount :(millions barrels)	Percent change from preceding year	Amount :(millions)	Percent of dis- posable income	Per barrel of beer <sup>2/</sup> tax-paid
1934	\$ 51.0	-	40	-	\$ 1,259	2.5 %	\$ 31.48
1935	56.3	10.4 %	45	13 %	1,445	2.6	32.00
1936	65.2	15.8	53	17	1,715	2.6	32.35
1937	69.2	6.1	56	5	1,813	2.6	32.53
1938	62.9	- 9.1	51	- 8	1,680	2.7	32.69
1939	67.7	7.6	53	3	1,730	2.6	32.77
1940	72.9	7.7	52	- 2	1,733	2.4	33.45
1941	88.7	21.7	57	11	1,976	2.2	34.43
1942	110.6	24.7	65	13	2,206	2.0	34.16
1943	124.6	12.7	73	13	2,543	2.0	34.98
1944	137.4	10.3	80	9	2,910	2.1	36.60
1945	139.7	1.7	82	3	3,015	2.2	36.84
1946	146.0	4.5	80	- 3	3,065	2.1	38.53

Treasury Department, Division of Tax Research

Source: Department of Commerce, press release of April 30, 1947 and Survey of Current Business, May 1942, April 1944, February 1946 and February 1947. Disposable income and consumer expenditures are from the series published prior to the revision given in Supplement to Survey of Current Business, July 1947. Tax-paid withdrawals: Annual Reports of the Commissioner of Internal Revenue.

<sup>1/</sup> Disposable income equals income payments less personal taxes.

<sup>2/</sup> Computed from rounded figures on consumers' expenditures and unrounded figures on tax-paid withdrawals.

of consumer incomes and the growth in population. Some of the change may represent a shift in consumer habits. But because of the large wartime increases in consumer incomes, changes in prices and the abnormal character of wartime consumption patterns, the trend in consumption of beer is not yet clear.

Except for two years since 1935, increases and decreases in disposable income 1/ have been accompanied by corresponding changes in beer consumption. (Table 5) For the years 1935-39 the changes in beer consumption and disposable income were relatively about the same, but for the whole war period the increase in beer consumption was only a little more than half as large as the increase in disposable income. For some time during and immediately following the war, consumption was restricted to a certain extent by the availability of supplies. Grain restrictions continued to affect production until March 1, 1947. 2/

Very little evidence is obtainable regarding the effect of price changes on the consumption of beer. There has been no reliable price series developed since repeal and the important changes which have occurred in other factors such as income and consumption patterns prevent a reliable determination of price effects. On the basis of changes in wholesale prices, it appears that the retail price of beer is not more than one-fourth to one-third above the prewar level. 3/ This increase is relatively small compared with changes in the prices of distilled spirits (tax included) which are now more than twice the prewar level. Despite the smaller change in price the increase in the consumption of beer has been only a little larger than the increase in the consumption of distilled spirits,

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1/ Disposable income represents income payments less personal taxes. Unless otherwise noted, Department of Commerce data on income and expenditures in this study are those issued prior to the revisions published in "National Income," Supplement to Survey of Current Business, July 1947.

2/ The general limitations on the use of grain in producing beer were terminated by War Food Order No. 141, Amendment 5, effective March 1, 1947. (12 FR, 1347.) This superseded W.F.O. No. 66. Restrictions on the use of wheat and rice were continued until W.F.O. No. 141 was terminated on July 1, 1947. (12 FR, 4368.)

3/ No price series on beer is maintained by the Bureau of Labor Statistics. The comparison has been made on the basis of unpublished wholesale prices for selected brands.

Prior to the tax increase in 1940 changes in the price of beer were apparently too small to have an important effect on consumption. The tax increase of \$1.00 per barrel on July 1, 1940 amounted to only about 3 percent of the retail price. Because consumption in the year following the tax increase failed to rise while disposable income increased, it has been contended that the higher tax rate had an adverse effect on the consumption of beer. 1/ It is doubtful, however, whether the failure of beer consumption to increase can be attributed to the change in tax because it appears that prices were not generally increased by retailers following the tax increase. 2/

### C. Outlook for the industry

The experience of the past 10 years indicates that most of the increase in consumption that has taken place has been the result of the rise in the level of consumer incomes. It is not possible to determine whether there is an increasing or decreasing trend in consumption. The tax-paid withdrawals in the calendar year 1947 increased approximately 10 percent over 1946, and exceed any previous year. Consumption in 1946 had dropped substantially below the level of 1945 and even below the level of 1944. After the removal of the principal grain restrictions in March 1947 the rate of production increased substantially.

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1/ House of Representatives, Revenue Revision of 1941, p. 1080.  
"Report on Effects of the Excise Taxes on the Brewing Industry."

2/ An extensive check of retail outlets by the Bureau of Internal Revenue disclosed that although producers and wholesalers commonly increased prices by the amount of the change in tax, about two-thirds of the retailers did not increase their prices. In other cases retailers increased prices by varying amounts, some by less than the amount of the tax and some by more than the amount of the tax. It was difficult for retailers to reflect the precise amount of the \$1.00 per barrel increase in terms of even coin intervals on the retail unit of sale. Retailers subsequently may have succeeded in making an adjustment for the tax through changes in the amounts served in the case of sales by the glass or in conjunction with other changes in the case of bottle sales.

As the result principally of the higher level of consumption, the industry is in a more favorable position than it was before the war. While a substantial number of small breweries have discontinued operations, some increase in plant capacity appears to have taken place since the close of the war. It appears that this is largely in the form of expansion of bottling facilities. Wartime experience may have enabled brewers to obtain a large output from their existing facilities. Operations apparently have been at a much higher percentage of capacity than before the war, resulting in lower overhead costs per unit of output. Offsetting these advantages, material and labor costs have risen. 1/ For 1945, the latest year for which the information is available, unit labor costs were 36.5 percent above the 1939 level. 2/ In the fiscal year 1947 the industry used 44.2 pounds of materials per barrel of beer produced compared with 50.0 pounds in the fiscal year 1942, a decrease of 12 percent. (Table 6)

In view of the high level of demand in relation to present capacity, the industry is probably experiencing much less competitive pressure on prices than before the war. Moreover, the continued growth in the proportion of beer sold in bottles and cans suggests that brand preference will be a more important factor in competition in the future. However, in view of the relatively large number of producing units which can enter the more important markets any substantial reduction in consumption would probably stimulate price competition.

- 1/ In 1947 the principal raw material, malt, reached a price approximately six times as high as in 1939. (Department of Labor, Wholesale Prices, December and Year 1939, and "Average Wholesale Prices and Index Numbers of Individual Commodities," October 1947.)
- 2/ Department of Labor, Productivity and Unit Labor Costs in Selected Manufacturing Industries, 1939-1945. According to these data there was a decrease in output per man-hour between 1939 and 1945 of 7.5 percent. It is possible that the reduction in productivity represented a temporary situation arising from unusual factors existing during the war.

Table 6

Materials used and production of fermented  
malt liquors, fiscal years 1935-1947

Fiscal year	Materials used (thousand pounds)	Production (thousand barrels)	Pounds of material per barrel produced
1935	2,393,453	45,229	52.9
1936	2,720,621	51,812	52.5
1937	3,055,774	58,748	52.0
1938	2,905,783	56,340	51.6
1939	2,738,260	53,871	50.8
1940	2,768,810	54,892	50.4
1941	2,761,101	55,214	50.0
1942	3,183,970	63,717	50.0
1943	3,465,033	71,018	48.8
1944	3,802,870	81,726	46.5
1945	3,971,334	86,604	45.9
1946	3,835,382	84,978	45.1
1947	3,887,175	87,857	44.2

Treasury Department, Division of Tax Research

Source: Annual Reports of the Commissioner of Internal Revenue.

V. Effects of the tax

A. On profits

The increases in tax made by the Revenue Acts of 1942 and 1943 probably did not adversely affect sales during the war years because of the existence of ceilings on prices and the limitations on materials and supplies which tended to restrict output. The industry showed large increases in profits during the war. In 1938 over one-half, and in 1939 nearly one-half, of the breweries filing corporation income tax returns <sup>1/</sup> showed a deficit, but by 1945 more than 95 percent of them reported profits. (Table 7) Aggregate net income before income taxes increased by about 190 percent from 1939 to 1945. On the basis of data reported by the Securities and Exchange Commission for listed corporations, the industry experienced further increases in profits in 1946. (Table 8) For these corporations the rate of return before income tax was twice as high in 1946 as in 1939. On the basis of net income after income taxes the rate of return exceeded that of the most profitable prewar year, 1936.

Data are not available on the profits of distributors or retail dealers in beer but it is probable that their profits have also been favorable. Some difficulty was experienced, however, in adjusting the price ceilings to reflect the increases in tax in 1942 and 1943. Since the increase in tax represented odd fractional cents for the retail package or glass of beer, the changes in price ceilings did not uniformly reflect the increases in tax. <sup>2/</sup> A change in the tax rate on beer usually does not work out to an even-cent basis for the different size units sold at retail. For this reason, the amount of a change in the tax rate would have an important bearing on tax shifting at the retail level. A change of \$1 or less per barrel amounts to less than one-half cent on all common retail units smaller than one quart. As will be seen from Table 9, it is difficult to make a change in rate which would facilitate price adjustments on all retail units.

The increase in the tax rate on beer during the war years amounted to 60 percent, but the increase in tax in relation to the price of beer has not been very large. <sup>3/</sup> The Federal tax now represents about 20 percent of the retail price (including tax) of the inexpensive brands of beer, compared with roughly 15 percent before the wartime tax increases. <sup>4/</sup> The tax is a lower percentage of price for "premium beer," and a lower percentage of the price of bottled beer than of draught beer of the same brand.

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<sup>1/</sup> The number of corporation income tax returns for breweries is approximately the same as the number of breweries reported in operation by the Alcohol Tax Unit. This would indicate that most of the units in the industry operate as corporations and are included in the corporation income tax statistics.

<sup>2/</sup> In 1942 the increase in the retail price to cover the increased tax exceeded the amount involved on 12-ounce bottles but was less than the amount involved on quart bottles. No increase was allowed on the price of draught beer because the amount involved was less than one-half cent on regular size glasses.

<sup>3/</sup> Because of the tendency for a tax levied at the manufacturers' level to be pyramided retail prices tend to increase by more than the amount of the tax.

<sup>4/</sup> The ratio will vary with the taxes imposed by State and local governments. For information on State taxes, see Treasury Department study "Federal-State Tax Coordination," July 1947.



Table 7

Breweries and malt producers: Number of corporation returns, compiled receipts, net income or deficit, and income taxes, 1938-1945

(Dollar amounts in millions)

Year	Total number of returns	Returns with net income					Returns with no net income		
		Number	Total	Net	Income	Income	Number	Total	
		of returns	of compiled receipts	income	taxes <sup>1/</sup>	after taxes	of returns	compiled receipts	Deficit
1938	650	281	\$698	\$ 62.8	\$ 11.0	\$ 51.8	369	\$ 158	\$ 10.5
1939	615	326	774	77.0	13.3	63.7	289	115	7.9
1940	562	262	743	62.7	14.4	48.3	300	154	11.0
1941	514	296	954	88.5	30.9	57.6	218	94	6.7
1942	485	368	1,193	120.7	59.9	60.8	117	48	2.5
1943	477	428	1,530	171.9	95.8	76.1	49	18	.9
1944	459	427	1,804	184.9	111.9	73.0	32	14	.5
1945	454	434	1,936	200.3	123.7	76.5	20	26	.5

Treasury Department, Division of Tax Research

Source: Statistics of Income, Part 2.

<sup>1/</sup> Including excess-profits taxes.

Table 8

Net profits before and after income taxes, and rate of return  
on net worth of breweries reporting to Securities and  
Exchange Commission, 1936-1946 <sup>1/</sup>

Year	Net profits		Net profits as percent of	
			net worth <sup>2/</sup>	
	Before income taxes	After income taxes	Before income taxes	After income taxes
(Millions)				
1936	\$ 9.7	\$ 7.8	24.3 %	19.7 %
1937	7.6	5.9	18.2	14.2
1938	8.2	6.6	18.3	14.7
1939	10.2	8.1	21.0	16.8
1940 <sup>3/</sup>	9.9	7.5	15.4	11.8
1941	13.8	8.7	20.8	13.1
1942	17.7	8.6	25.6	12.5
1943	25.7	11.4	31.6	14.0
1944	29.3	11.6	33.9	13.4
1945	38.7	13.8	35.9	12.8
1946	46.4	25.0	44.9	24.2

Treasury Department, Division of Tax Research

Source: Securities and Exchange Commission, Survey of American Listed Corporations, "Data on Profits and Operations," Part I.

- <sup>1/</sup> Companies included for the whole period are: Berghoff Brewing Corporation, Brewing Corporation of America, The Berger Brewing Company, Gentlivre Brewing Corporation, Columbia Brewing Company, The Croft Brewing Company, Duquesne Brewing Company of Pittsburgh, Falstaff Brewing Corporation, Fort Pitt Brewing Company, Peter Fox Brewing Company, Frankenmuth Brewing Company, Goebel Brewing Company, Griesedieck Western Brewery Company, Harvard Brewing Company, G. Heileman Brewing Company, Hyde Park Breweries Association, Inc., G. Krueger Brewing Company, Minneapolis Brewing Company, Pfeiffer Brewing Company, Pittsburgh Brewing Company, The Renner Company, Standard Brewing Company of Scranton, Sterling Brewers, Inc., and Tivoli Brewing Company. Companies included for only part of the period are: Atlantic Company (1940-1946), Canadian Breweries, Limited (1945-1946), Cooper Brewing Company, Inc. (1945-1946), Friars Ale Brewing Company (1944-1946), George Muehlebach Brewing Company (1945-1946), Red Top Brewing Company (1945-1946), Jacob Ruppert (1943-1946), Grand Valley Brewing Company (1936-1943).
- <sup>2/</sup> Net worth as of the beginning of year. Includes preferred and common stock and surplus.
- <sup>3/</sup> Report for the Croft Brewing Company was for a nine-month interim period. Net worth ratios are adjusted to a full year.

Table 9

Fermented malt liquors: Tax and tax plus mark-up on the tax for selected retail sales units and various changes in rate of tax per barrel

(In cents)

	\$1 tax per barrel		\$2 tax per barrel		\$3 tax per barrel	
Size of retail sales unit	Tax per retail unit	Tax plus mark-up per retail unit <sup>1/</sup>	Tax per retail unit	Tax plus mark-up per retail unit <sup>1/</sup>	Tax per retail unit	Tax plus mark-up per retail unit <sup>1/</sup>
<u>Bottle or can</u>						
Quart	.81	1.34	1.61	2.68	2.42	4.02
12-ounce	.30	.50	.60	1.00	.91	1.51
<u>Draught beer</u>						
12-ounce	.30	.56	.60	1.12	.91	1.68
11-ounce	.28	.51	.55	1.02	.83	1.54
10-ounce	.25	.47	.50	.93	.76	1.40
8-ounce	.20	.37	.40	.74	.60	1.12
7-ounce	.18	.33	.35	.65	.53	.98
6-ounce	.15	.28	.30	.56	.45	.84

Treasury Department, Division of Tax Research

<sup>1/</sup> The figures showing tax plus mark-up assume that in addition to passing on the tax, the wholesaler takes a mark-up of 23 percent on the tax and the retailer a further mark-up of 35 percent in the case of bottled beer (O.P.A. regulations governing sales for off-premise consumption). In the case of draught beer, the respective mark-ups are assumed to be 23 percent and 50 percent.

Throughout the period from April 1933 to July 1940 the tax on beer was \$5 per barrel. Prices also remained fairly stable after the first year or two of legalized sales. There is no apparent basis for determining the effect of the tax in this period. Per capita consumption was much higher prior to prohibition when the tax was only \$1 per barrel. It is doubtful, however, whether a comparison of tax rates for these periods has much significance even if allowance were made for changes in prices. It is likely that changes in consumption habits between the two periods were a much more important factor than the increase in the tax rate.

Since 1940 price increases, exclusive of tax, have been greater than the increase in the tax rate of \$3 per barrel. Although it is probable that the increase in consumption would have been somewhat greater in the absence of the tax increase, past experience does not give a good indication of how much greater. The effect of the total price increase, including tax, apparently has been smaller than the increasing effect which higher incomes had on consumption. It should be noted, however, that the increase in the price of beer, including the higher tax, has been substantially less than the general increase in prices of consumer goods.

The present high level of demand in relation to the capacity of the industry minimizes any adverse effect that the tax may have on sales. With a very substantial reduction in consumption or increase in the capacity of the industry, however, the effect of the tax on the profits of the industry probably would be more serious. Available evidence indicates that in the more important market areas price competition might become intensive under such conditions. While some producers in some markets might be able to maintain prices through reduction in supplies placed on the market, for the bulk of production prices net of the tax probably would be lower by reason of the existence of the tax.

#### B. On competition

Beer competes with other taxed alcoholic beverages, and with non-taxed beverages. The taxes on alcoholic beverages probably cause some shift in consumption to non-alcoholic beverages. Moreover, the taxes on alcoholic beverages are not uniform. In relation to price the tax on beer is lower than the tax on distilled spirits but generally higher than the taxes on wine. But wartime increases in the tax on beer were relatively smaller than the increases in the taxes on wine and distilled spirits. Since demand for alcoholic beverages has continued at a relatively high level following the close of the war and uncertainties exist with respect to the supply of distilled spirits and beer, it is possible that the competitive position of the different products has not yet been seriously affected by the present tax rates.

Experience has not shown the extent to which price is a factor in consumption of these products and whether demand is more sensitive to price changes for one product than for another.

The tax may have some effect on the competitive position of different producers in the brewing industry. Since the tax is a specific amount per barrel, it represents a higher proportion of the price (before tax) of the lower-priced than the higher-priced products. This tends to create a competitive disadvantage for the lower-priced products. For example, the price of certain premium beers at the brewery is from 50 to 75 percent higher than the price of local non-premium beer. <sup>1/</sup> The price including tax, however, is only about one third higher. The specific tax thus brings the prices of the different products relatively much closer and this may induce some shift in consumption to the higher-priced product. <sup>2/</sup> However, although the appeal to consumers based on price differentials is reduced by the tax, the difference between the low and high priced products is still large enough for non-premium beer to account for the major part of sales.

#### C. On consumers

Reported data on consumer expenditures for beer in relation to the size of consumer incomes do not appear to be sufficiently complete to afford a reliable indication of the distribution of the tax burden. <sup>3/</sup> If to a large extent the lower income consumers purchase lower priced beer, the tax would represent a higher proportion of their expenditures for beer than of the expenditures of the higher income groups. This factor, together with the widespread consumption of beer, suggests that the tax burden may be distributed somewhat regressively.

Beer is not included in the Consumers' Price Index of the Bureau of Labor Statistics.

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<sup>1/</sup> Based on unpublished price information of the Bureau of Labor Statistics.

<sup>2/</sup> The absolute difference in price, tax included, may remain the same as the difference before tax. But when the price for both products is increased very substantially by the tax the relative difference in the prices of the two products may become very small. (Cf. Treasury Department Study, "Federal Excise Taxes on Tobacco," pp. 23, 24.)

<sup>3/</sup> Data for 1941 expenditures are reported in Department of Labor, Family Spending and Saving in Wartime, Bulletin No. 822, 1945, p. 78, but it is indicated that in the survey consumers may have understated their expenditures by as much as two-thirds. Expenditures as reported were proportional to the size of the family income.

As indicated above, the consumption of beer has fluctuated less than consumer incomes. <sup>1/</sup> If this relationship exists in the future, the tax would have the effect of withdrawing relatively more purchasing power from the income stream in periods of low business activity than in periods of high business activity.

#### VI. Administration and compliance

The number of taxpayers involved is not large, there being less than 500 breweries in operation. However, the Government supervision over brewery operations entails additional expenditures not involved in most of the excise taxes. The procedures prescribed for construction and operation of plants and detailed reports required of taxpayers for protection of the revenue impose substantial compliance burdens on breweries. However, there is less possibility for evasion of this tax than the tax on distilled spirits, and enforcement costs are correspondingly lower. Although the present tax is relatively high compared with the value of beer, because of its bulk, it is difficult to produce or transport the product illegally without detection.

#### VII. Technical problems

The principal technical problems that arise under this tax are:

1. Whether floor stocks taxes should be imposed or refunds made on floor stocks, if the tax rate is changed.
2. The taxation of imported beer.

##### A. Floor stocks taxes and refunds

Floor stocks taxes were levied on beer under the Revenue Acts of 1914, 1940, 1942, and 1943. <sup>2/</sup> Although beer is too perishable to be stored for long periods, withdrawals in the absence of a floor stocks tax probably would be large enough to result in substantial avoidance of an increase in the tax. Moreover, an increase in tax

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<sup>1/</sup> P. 46.

<sup>2/</sup> The Revenue Acts of 1917 and 1918 did not contain special provisions for taxes on floor stocks. However, the increase in tax under the 1917 Act was interpreted as being applicable to stocks removed before the effective date of the Act. The 1940 Act provided an exemption for stocks held on premises of dealers who paid an occupational tax as a retail dealer but not as a wholesale dealer.



without provision for a tax on floor stocks would result in inequities because of the superior financial resources and facilities of some dealers and brewers for carrying such stocks.

There has been no experience with a reduction in the tax on beer since 1901. <sup>1/</sup> However, in connection with possible future reduction in the war tax rate from \$8 to \$7 per barrel the present law provides for refunds on floor stocks subject to certain conditions. <sup>2/</sup>

Tax-paid floor stocks of fermented malt liquors normally appear to be small in relation to sales. The stocks reported under the Revenue Act of 1942 represented less than three weeks' tax-paid withdrawals and under the Revenue Act of 1943 less than two weeks' withdrawals. (Table 10) In each of these years stocks of retailers amounted to less than a week's supply. The stocks of bottled beer are probably larger in relation to sales than stocks of draught beer. In view of the small stocks, the losses which the industry might experience under a tax reduction without provision for refunds on floor stocks would not be large.

A tax reduction of less than \$3 per barrel would represent less than one cent on all retail sales units, except quart bottles or two 12-ounce bottles. Thus, retailers might gain a windfall from a refund on floor stocks unless some provision were made to assure consumers the benefit of the reduction. <sup>3/</sup> Because their sales are in larger quantities, wholesalers and brewers could adjust prices by the amount of the tax change. Since competition would tend to force reductions in prices by brewers and wholesalers there would be more need for a refund on floor stocks at these levels.

The payment of floor stocks refunds to all dealers would involve almost 400,000 returns. There is more possibility of fraud and closer examination of returns is required on refunds than on floor stocks taxes. This work could be reduced by providing for refunds only where stocks exceeded a minimum amount. However, this type of provision would discriminate against small dealers. The difficulties involved could

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<sup>1/</sup> Although the rate of \$6 per barrel imposed by the 1918 Act was reduced to \$5 by the Liquor Taxing Act of 1934, a tax of \$5 per barrel on 3.2 percent beer had been in effect from April 7, 1933.

<sup>2/</sup> Revenue Act of 1945, Section 302. The refund provision was made permanent by the Excise Tax Act of 1947.

<sup>3/</sup> A provision of this nature is included in Section 1656(b) of the Internal Revenue Code, relating to refunds on alcoholic beverages.

Table 10

Floor stocks of tax-paid fermented malt liquors in possession  
of producers and distributors on dates of imposition of  
floor stocks taxes under Revenue Acts of 1940-1943

(In thousands of barrels)

	: July 1, : 1940	: November 1, : 1942	: April 1, : 1944
Stocks:			
Retail dealers	1/	1,448	1,445
Wholesale dealers	1,113	1,608	951
Brewers	454	453	311
Other	0	1	1
Total	2/	3,510	2,709
Percent of total held by:			
Retail dealers	-	41.3%	53.3%
Wholesale dealers	-	45.8	35.1
Brewers	-	12.9	11.5
Other	-	*	*
Total		100.0	100.0
Tax-paid withdrawals during calendar year 3/	51,811	64,584	79,514
Stocks as a percent of tax-paid withdrawals:			
Retail dealers	1/	2.2%	1.8%
Wholesale dealers	2.1%	2.5	1.2
Brewers	.9	.7	.4
Other	-	*	*
Total	2/	5.4	3.4

Treasury Department, Division of Tax Research

Source: Unpublished data of the Alcohol Tax Unit, Bureau of Internal Revenue.

1/ Stocks held by retail dealers on retail premises exempt from tax and figures therefor not available.

2/ Not available.

3/ Domestic beer only. Imports are negligible in ordinary years but may have been as much as 1 percent of total withdrawals in 1944.

\* Less than .05 percent.

be minimized and greater equity achieved by limiting refunds to wholesalers and producers.

B. The taxation of imported beer

Most excise taxes apply to products imported as well as to those produced within the United States. Imported beer, however, is subject only to tariff duty. For many years the duty was substantially higher than the excise tax on domestic beer, but as the result of decreases in the import duty and increases in the excise tax the duty is now 25 cents per barrel less than the excise tax of \$8. 1/ This has increased competition from imported beer to some extent. As a result legislation has been proposed to subject imported beer to the present excise tax. 2/ There are different ways in which the present discrimination might be corrected. This matter, together with other cases of discrimination between imported and domestic products, is being made the subject of a separate study.

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1/ Under the Tariff Act of 1930 the duty on beer was \$31 per barrel. Under the provisions of Sec. 336 of this Act the rate was reduced to \$15.50 per barrel and was subsequently reduced under trade agreements to the present level of \$7.75. Prior to the Revenue Act of 1940, the excise tax on beer was \$5 per barrel.

2/ H. R. 2287, 80th Cong., 1st Sess.

### PART III - Excise Taxes on Wines

#### I. Description of the tax

The tax is imposed on wine, which is defined as the product of the alcoholic fermentation of the juice of fruits and berries or imitations thereof. The tax is levied at a specific rate on the basis of the volume of the product and varies with the type of wine.

Payment of the tax is required at the time of removal of the wine from the winery, bonded ~~storeroom~~, or customs custody, for consumption or sale. The tax is payable by the proprietor of the winery or warehouse, or the importer, and is paid by purchasing tax stamps to be affixed to the containers prior to removal. 1/

Exemptions from the tax are provided for withdrawals for:

1. Export.
2. Use as distilling material in the production of brandy and alcohol.
3. Production of vinegar or de-alcoholized wine.
4. Family use. 2/
5. Use of the United States (but not for resale in the United States).

#### II. Changes in the tax since 1913

Wines have been taxed continuously since 1914, the tax remaining in effect during the period of prohibition. Prior to 1914 a tax was imposed on artificial or imitation wine, but this tax apparently was superseded by the tax levied under the Revenue Act of 1916. 3/ The rates and effective dates of changes in the various wine taxes since 1913 are shown below:

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1/ In the case of bulk shipments by tank truck or railroad tank car, the stamps are affixed to the route board of the truck or car.

2/ Not exceeding 200 gallons per year.

3/ The tax on artificial or imitation wine was not repealed until the Act of March 22, 1933. (Public No. 3, 73d Cong., 1st Session)

Changes in tax rates since 1913

Revenue Act	Effective date	Rate						
		Still wines <u>a/</u> (per wine gal.)			Sparkling wines Natural : carbonated : (per ½ pint, or fraction thereof)		Liqueurs, cordials, etc. <u>b/</u>	
1914	Oct. 22	-	8¢ <u>c/</u>	-	5¢	5¢	1½¢	
1916	Sept. 8	4¢	10	25¢	3	1½	No change	
1917	Oct. 3	8	20	50	6	3	3¢	
1918	Feb. 24, 1919	16	40	\$1	12	6	6	
1928	June 29	4	10	25¢	-----No change-----			
1934 <u>d/</u>	Jan. 12	10	20	40	5¢	2½¢	2½¢	
1936 <u>e/</u>	July 10	5	10	20	2½	1½	1½	
1940	July 1	6	18	30	3	1½	1½	
1941	Oct. 1	8	30	65	7	3½	3½	
1942	Nov. 1	10	40	\$1	10	5	5	
1943	Apr. 1, 1944	15	60	2	15	10	10	

a/ Beginning with the Revenue Act of 1916, the rates shown are, respectively, for wine containing by volume (1) not over 14-percent alcohol, (2) over 14-percent but not over 21-percent alcohol, and (3) over 21-percent but not over 24-percent alcohol. Wine containing over 24 percent of alcohol by volume is classified as a distilled spirit and taxed as such.

b/ Applicable where product is made from fortified wine and distilled spirits. Cordials and liqueurs made from unfortified wine are subject to the rectification tax.

c/ Proportional rates provided for fractional parts of a gallon.

d/ Liquor Taxing Act of 1934.

e/ Liquor Tax Administration Act of 1936.

### III. Revenue collections, 1936-1947

The taxes on wines produce the least revenue of the taxes on the three broad groups of alcoholic beverages. For the fiscal year 1947 collections from the taxes on wines amounted to only 2.3 percent of the collections from all taxes on alcoholic beverages.

Collections, fiscal years 1936-1947

(In millions)

Fiscal year	:	Collections <u>a/</u>	::	Fiscal year	:	Collections <u>a/</u>
1936		\$ 10.4		1942		\$ 25.2
1937		9.1		1943		33.7
1938		6.9		1944		34.1
1939		7.8		1945		47.4
1940		9.4		1946		60.8
1941		12.8		1947		57.2

a/ Includes collections from the tax on brandy used for fortification of wines which was in effect prior to July 1, 1940.

### IV. Economic background of the industry

#### A. Character of supply

##### 1. Types of wines and sources of supply

There are several different classes of wine but because of variations in their characteristics or use no terminology is uniformly accepted. The following classifications indicate the more important ways in which they are referred to:

<u>Tax classification</u>	<u>General descriptive terms</u>	<u>Trade examples <u>a/</u></u>
<u>Still wine</u>		
Under 14% .....	Natural (unfortified) or table	(Sauterne, claret, burgundy)
14-21% .....	Fortified, sweet, or dessert	(Port, sherry, tokay, muscatel)
21-24% <u>b/</u> .....	(not marketed)	-----
<u>Sparkling wine</u>		
Natural )	Sparkling	(Champagne,
Artificially carbonated )		(sparkling burgundy)
bonated )		

a/ In trade usage wines are often distinguished by degree of dryness or sweetness.

b/ Wines containing more than 24 percent alcohol are classed as distilled spirits.



The fruits used in the production of wine ordinarily do not ferment to more than 14 percent alcohol. The product of complete fermentation generally has a non-sweet or "dry" taste, although some natural wines are sweet-tasting. 1/ The "fortification" of wine by the addition of distilled spirits, such as brandy or alcohol, prior to the completion of the fermentation of the sugar content, produces a sweet or "fortified" wine. The addition of spirits results in the product having a higher alcoholic content than the natural wines. Sparkling wines are made from unfortified still wines by secondary fermentation in bottles or other containers, or by artificial carbonation.

Domestic production of wine was smaller than imports prior to about 1870, but since that time it has exceeded imports. 2/ Prior to the outbreak of World War II imports represented only about 5 percent of the consumption of still wines (Table 1) but more than 50 percent of the consumption of sparkling wines. (Table 2) On the basis of volume only about 2 percent of the total wine consumption is represented by sparkling wine. However, sparkling wines sell at a much higher price and represent a larger proportion of the total on the basis of value. Since repeal still wine commercially produced has predominantly been in the fortified category. During the period 1936-1939, still wine having an alcoholic content of 14 percent or more accounted for two-thirds of the total. (Table 1) It appears that this represents a marked shift from the ratio prevailing when wines were not subject to tax. 3/ Home wine production was stimulated during the prohibition period and it has been estimated that the amount of home-produced wine in the period 1936-1939 exceeded the tax-paid withdrawals of wine containing not over 14 percent alcohol. 4/

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1/ Grapes vary in their sugar content and taste. Eastern grapes usually have a lower sugar content than California grapes and it may be necessary to add sugar to the juice to make a stable wine. In California the addition of sugar is prohibited.

2/ Statistical Abstract, 1946, p. 375.

3/ Tariff Commission, Grapes, Raisins and Wines, 1939, p. 290. About 60 percent of the still wines consumed prior to prohibition were estimated to be of the table variety.

4/ It has been estimated that home produced wine averaged 32 million gallons in the years 1936-1939. (Tariff Commission, War Changes in Industry Series, "Grapes and Grape Products," 1947, p. 35.) Estimated home-produced wine plus tax-paid withdrawals of domestic still wines containing not more than 14 percent alcohol amounted to 56 percent of the estimated total consumption of domestic still wines in the years 1936-1939.

Table 1

Still wines: Wineries operated, production, tax-paid withdrawals, and stocks on  
June 30, fiscal years 1935-1947

(Thousands of wine gallons)

Fiscal year	Wineries operated	Production			Tax-paid withdrawals						Stocks on June 30
		Total	For use as wine	For use as distilling material	Total	Domestic			Imported		
						Total	Not over 14 percent alcohol	Over 14 and not over 21 percent			
					1/						
1935	1,116	91,729	3/	3/	37,858	35,419	12,146	23,270	4/	2,441	56,464
1936	1,245	170,876	3/	3/	50,005	47,484	15,790	31,691	4/	2,521	78,545
1937	1,206	122,045	3/	3/	65,581	62,118	20,994	41,068	4/	3,463	68,196
1938	1,175	228,726	3/	3/	64,375	61,329	21,353	39,938	4/	3,046	102,120
1939	1,137	231,959	3/	3/	70,713	67,564	22,462	45,048	4/	3,150	94,944
1940	1,090	212,368	3/	3/	86,472	82,571	24,673	57,809		3,901	93,421
1941	1,064	286,371	3/	3/	91,612	89,670	26,622	62,782		1,943	118,530
1942	1,010	313,706	127,548	186,158	104,589	103,490	30,135	73,051		1,099	134,175
1943	980	195,225	78,313	116,912	112,319	110,637	37,227	73,097		1,687	91,805
1944	911	264,853	100,175	164,677	96,080	87,259	37,481	49,764		8,821	95,229
1945	903	314,983	108,255	206,729	95,344	91,752	30,946	60,799		3,592	103,930
1946	880	379,936	119,696	260,240	113,664	110,584	31,542	79,027		3,080	103,374
1947	840	515,335	169,627	345,708	107,887	104,129	27,763	76,353		3,758	161,647

Treasury Department, Division of Tax Research

Sources: Annual Reports of the Commissioner of Internal Revenue; Department of Commerce, Foreign Commerce and Navigation of the United States.

1/ Includes small amounts with alcoholic content over 21 percent but not over 24 percent.

2/ Includes vermouth produced at wineries but does not include substandard wines for use as distilling materials.

3/ Not available.

4/ Includes all vermouth.

Table 2

Sparkling wines: Premises operated, production, tax-paid withdrawals, and stocks on June 30, fiscal years 1935-1947

(Thousands of wine gallons)

Fiscal year	Premises operated 1/	Production 2/	Tax-paid withdrawals 2/					Stocks on June 30 2/
			Total	Domestic			Imported	
				Total	Natural	Artificial		
1935	142	311	551	264	3/	3/	287	464
1936	134	414	570	290	3/	3/	280	539
1937	127	481	963	395	3/	3/	567	582
1938	121	489	903	361	3/	3/	542	662
1939	109	334	829	317	260	57	512	647
1940	118	482	1,063	419	344	74	644	660
1941	107	911	981	723	655	68	258	794
1942	113	1,229	978	878	827	51	100	1,050
1943	125	1,017	1,212	1,104	1,048	56	108	882
1944	112	1,510	1,438	1,348	1,255	93	90	936
1945	109	1,551	1,328	1,263	1,223	41	65	1,132
1946	109	2,028	2,126	1,786	1,749	37	340	1,225
1947	109	2,427	1,951	1,549	1,518	31	402	1,975

Treasury Department, Division of Tax Research

Source: Annual Reports of the Commissioner of Internal Revenue; Department of Commerce, Foreign Commerce and Navigation of the United States.

- 1/ Represents wineries, bonded storerooms, and field warehouses operated during the period 1943-1947. Prior to this includes only wineries operated. The number of field warehouses and bonded storerooms operated varied from 9 to 22.
- 2/ Converted to wine gallons on the basis of 20 half-pint units to the gallon.
- 3/ Not available.

During the war home wine production was sharply curtailed, due largely to the restrictions on shipment of California grapes to the eastern States, but this output is expected to revive because of the savings involved. 1/

## 2. Concentration of production

The domestic wine industry is concentrated geographically in two principal sections, the eastern States and California. The wine production of California has for some time represented more than 90 percent of the total. In the production of sparkling wine, however, this State is less important than New York.

Wine production in California is an integral part of the grape industry, furnishing the market outlet for nearly one-half of the grape crop of the State on the average. The wine industry is greatly affected by fluctuations in the supply of grapes and in the demand for table grapes and raisins, as well as by changes in the demand for wine. Most of the brandy produced is subsequently used for the fortification of wine. It has been estimated that about 75 percent of the producers of wine and brandy grow their own grapes and account for 50 percent of the production of wine and brandy. 2/ In addition, cooperative wineries owned by vineyardists produce an estimated 25 percent. Thus only about 25 percent of the production is represented by the so-called "commercial wineries", which generally purchase their grapes.

In the past, wine production has been conducted on a relatively small scale, but there appears to be an increasing concentration of production among fewer producers. 3/ Since 1935 the number of wineries has declined by about one-third. (Table 1) In 1939 the ten largest plants produced about one-fourth of the value of products of the industry. (Table 3) For the same year the value of products for 37.5 percent of the wineries was less than \$20,000 and these wineries accounted for only 3.4 percent of the total value of products. 4/ Later

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1/ Ibid, pp. 9, 34.

2/ Committee for Reciprocity Information, Information and Views on Table Wine, Sparkling Wine, Vermouth and Brandy, Wine Institute et al, 1946, p.7.

3/ Grapes, Raisins and Wines, p. 225.

4/ Data for 1939 are from the Census of Manufactures. The number of establishments reported by the Census is much smaller than the number reported by the Bureau of Internal Revenue, due largely to the omission from the Census of very small wineries and those producing distilling material for brandy. The only earlier data available are for 1935 when the 8 largest producers representing 11 wineries accounted for nearly 38 percent of the total value of products for the industry. (National Resources Committee, The Structure of the American Economy, Part I, "Basic Characteristics," 1939, pp. 256-257). Production was much smaller in 1935 and it is possible that the largest wineries were able to resume production more rapidly than the smaller wineries after repeal.

Table 3

Number of establishments producing wine and value of products  
classified by size of value of products, 1939

Value of products (\$000)	Establishments		Value of products	
	Number	Percent of total	Amount	Percent of total
5 - 20	113	37.5 %	\$ 1,105,982	3.4 %
20 - 50	58	19.3	1,939,922	5.9
50 - 100	46	15.3	3,213,306	9.8
100 - 250	42	14.0	6,642,954	20.3
250 - 500	32	10.6	11,259,689	34.3
500 - 1,000	7	2.3	4,413,253	13.5
1,000 - 2,500	3	1.0	4,206,974	12.8
2,500 - 5,000	-	-	-	-
5,000 and over	-	-	-	-
Total	301	100.0	\$32,782,080	100.0

Treasury Department, Division of Tax Research

Source: Department of Commerce, Census of Manufactures: 1939,  
Vol. I, pp. 192, 205-206.

Note: Does not include establishments engaged solely in  
fortifying wines made by others, nor those bottling  
wines not of their own manufacture.

information is not as detailed as that for 1939. Data from the industry, however, indicate that by 1943 the ten largest wineries in California had nearly 50 percent of the storage capacity for the State. 1/ Storage capacity appears to be a relatively good index of production, but since the average price of California wine is lower than for the country the concentration on the basis of value of production is probably somewhat lower. 2/

An important development in the growth of concentration in the California wine industry has been the purchase or lease of wineries by the leading producers of distilled spirits, which occurred during the war. As of December 1943 the storage capacity of wineries owned or leased by four producers of distilled spirits was estimated to be 23 percent of the total of all wineries in California. 3/ Some of the largest wineries are owned by cooperatives. In December 1943 two of these accounted for over 11 percent of the total storage capacity for the State. 4/ The concentration of production on the basis of number of producers is probably substantially higher than it is on the basis of number of wineries, since some of the important producers have more than one winery. Despite the apparent increase in concentration, it has not yet reached a point where it has had a marked effect on competition and the price structure in the industry.

### 3. Competition and price policy

Competition and price policy in the wine industry have been conditioned to a substantial extent by the interrelationship between wine production and grape growing. Not only has wine furnished a major outlet for grapes, but it is also in the unique position of providing the residual demand for grapes when the crop is large because it affords a means of converting perishable grapes into a semi-perishable product. 5/

- 1/ U. S. Senate, Hearings before a Subcommittee of the Committee on the Judiciary on S. Res. 206, 78th Congress, 2nd Session, Part 2, p. 337. Data on total capacity figures were obtained from Wine Institute Bulletin, No. 340, April 18, 1947, p. 6.
- 2/ Department of Commerce, Census of Manufactures: 1939, Vol. II, p. 225. California wineries reported 87.1 percent of the total wine output, but only 70.0 percent of the total value of the products.
- 3/ Hearings on S. Res. 206, p. 337, and Wine Institute Bulletin, April 18, 1947, p. 6.
- 4/ Ibid.
- 5/ In the view of the industry, "Wine and brandy are the 'salvage' outlets for grapes that cannot find a profitable market as fresh fruit or as raisins." (Committee for Reciprocity Information, Information and Views on Table Wine, Sparkling Wine, Vermouth and Brandy, Wine Institute et al, 1946, p. 10.) Raisins also provide an outlet for excessive supplies of fresh grapes to some extent.



Fluctuations in grape production are relatively large themselves but the fluctuations in wine production are even larger. Over the past ten years the changes in wine production were on the average more than twice as large as the changes in the grape crop, and in the prewar period the difference was even greater. (Table 4) The large fluctuations in output and competition in the industry produce a very unstable price structure. When output is excessive prices fall sharply and distress sales are made by producers in a weak financial position. 1/

The Government has taken certain measures which have helped to stabilize the industry, but these have principally related to raisin products. In the years 1934-1939 the Federal Government purchased a considerable proportion of the raisin crop. 2/ In 1938 when there was an unusually large grape crop the Federal Government and the State of California supported a program for turning surplus grapes into brandy which was to be held off the market until conditions improved. 3/ During the war the wine industry did not experience excessive production, but output in 1946 was substantially larger than in any previous year and stocks of wine increased considerably. 4/

In addition to the wide variations in supply in relation to the demand for wine, competition has been influenced by the high degree of integration of grape growing and wine production. While there seems to be some tendency to segregate the two businesses, the industry estimates given above show that in California, including cooperatives, 75 percent of the wine is produced by growers of grapes. Different types of grapes may be used for different purposes: (1) wine only, (2) table grapes or wine, and (3) table grapes, raisins or wine. Thus although grapes may be produced primarily for the table or raisin markets they may be converted into wine. The grower-vintner usually views his business as an integrated unit from which he can obtain a larger return at certain times by processing than by selling his grapes. The investment required

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1/ Grapes, Raisins and Wines, pp. 249, 304.

2/ Ibid., pp. 65-67.

3/ Ibid., pp. 67-68.

4/ In 1942-1945 the crushing of grapes for wine was greatly limited by Government conservation orders requiring almost all raisin varieties to be dried into raisins. ("Grape and Grape Products," p. 7.) The Commodity Credit Corporation has discretionary authority to support grape and raisin prices and in 1947 invited bids for the sale of raisins.

Table 4

California grapes: Harvested production, crush by commercial wineries, and average price paid to farmers for grapes crushed by wineries, 1933-1947

Year	Harvested production (000 tons)	Crush by commercial wineries (000 tons)	Average price paid to farmers (per ton) <sup>1/</sup>	Percentage increase or decrease (-) over previous year	Production <sup>1/</sup>	Crush by commercial wineries
1933	1,657	444	<u>2/</u>	-	-	-
1934	1,700	530	\$ 16	2.6 %	19.4 %	19.4 %
1935	2,194	887	10	29.1	67.4	67.4
1936	1,714	494	17	- 21.9	- 44.3	- 44.3
1937	2,454	911	19	43.2	84.4	84.4
1938	2,531	862	11	3.1	- 5.4	- 5.4
1939	2,228	712	13	- 12.0	- 17.4	- 17.4
1940	2,250	996	13	1.0	39.9	39.9
1941	2,547	1,120	20	13.2	12.4	12.4
1942	2,160	596	30	- 15.2	- 46.8	- 46.8
1943	2,789	790	78	29.1	32.6	32.6
1944	2,514	858	100	- 9.9	8.6	8.6
1945	2,651	1,170	55	5.4	36.4	36.4
1946	2,918	1,652	91	10.1	41.2	41.2
1947	2,876	<u>3/</u>	<u>4/</u>	- 1.4	-	-

Treasury Department, Division of Tax Research

Sources: Production and crush: Department of Agriculture, Agricultural Statistics, 1946, p. 191, and Crop Production, "1947 Annual Summary," p. 85. Average price: Department of Agriculture, Bureau of Agricultural Economics.

- <sup>1/</sup> Average for different varietal types at first delivery point.  
<sup>2/</sup> Not available.  
<sup>3/</sup> Not yet available but is expected to be less than 1 million tons.  
<sup>4/</sup> Not yet available but is materially lower than in recent years.

for a winery, however, appears to be substantial in relation to the investment required for growing grapes. 1/ The effect of fluctuations in grape crops on wine prices might be modified to a considerable extent if wine were aged as long as whisky. But prior to the war wine stocks at the beginning of the season were generally less than sales for the subsequent year. This indicates that some wine sales are from the current year's production and would tend to reflect grape prices for the preceding crop.

The competition which exists at the production level is reflected in the marketing of wine. The sale of wine under producer brands appears to be relatively smaller than for many consumer goods, including other alcoholic beverages. Some of the larger wineries distribute their products on a national basis through their own sales organizations and some of the smaller producers have established markets for their branded products. Other producers sell their wine to distributors who in some cases purchase wine in bulk and bottle it themselves. Some of the bottling is done in California, but the substantial saving in transportation charges on bulk shipments favors bottlers in the large eastern consuming centers. 2/ In 1941, 89 percent of the interstate rail shipments of wine from California was in bulk, but this declined to 52 percent in 1946. 3/ Under the price ceilings established on wine it had become profitable for producers to shift their sales from the bulk to the bottled product.

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1/ Grapes, Raisins and Wines, p. 225. In 1937 the cost of a winery was estimated to be 11 cents per gallon of cooperage capacity for natural wine and 15 cents per gallon for fortified wine. Assuming the average yield for the past ten years of 5 tons of grapes per acre and 100 gallons of wine per ton, the winery investment required to handle the output of grapes from one acre would have been from \$50 - \$75. According to information supplied by the Berkeley Bank for Cooperatives, in recent years the cost of wineries producing fortified wines has ranged from \$50-\$60 per ton of grape-crushing capacity and approximates in many instances the investment in the vineyard.

2/ In 1937 the estimated cost of shipping wine from California to New York in bottles was nearly twice as much as the cost of shipping it in tank cars. (Grapes, Raisins and Wines, p. 300.)

3/ Wine Institute, Wine Institute Bulletin No. 364, December 5, 1947, p. 23.

The leading producers in the industry market both natural and fortified wines under their brand names while the smaller producer brands generally are limited to natural wines. There is no information on the total number of different brands competing at retail but the price list of one State monopoly on December 1, 1947 showed 44 domestic brands of natural wines and 78 domestic brands of fortified still wines. (Table 5) The leading producer brands are duplicated in each of the varieties of wine. The range of December 1, 1947 prices in this State's stores was fairly large, from 55 cents to \$1.45 per bottle on natural wines and from 65 cents to \$2.15 on fortified wine. The number of domestic brands offered in this State is now larger than before the war but the number of imported brands has decreased. The number of brands available in many stores in the license States probably is larger, and in addition to producer and distributor brands these stores may handle their own private brands. It appears that the proportion of wine sold under private brands was important before the war. 1/

As yet efforts to reduce price competition in the distribution of wine have not been very effective. The State of California has supported the advertising of wine from contributions made by producers to the Wine Advisory Board. This institutional advertising facilitates the advertising of individual brands. There is considerable impetus for the industry to develop in this direction because of the almost universal prohibition of bulk sales to consumers by the various States. While this has the effect of increasing the cost to the consumer and decreasing the market for wine, 2/ it tends to result in a more stable price structure. The sale of wine in gallon and one-half gallon containers, however, does provide a low-price outlet for wine. There has been some effort to place wine sales under the Fair Trade Acts of the various States, but this does not appear to have been very widespread because of the lack of concentration on producer brands and the relative unimportance of wine in total sales of liquor stores. "Outside of California, it appears that only a comparatively few wines have been placed under retail price maintenance." 3/

#### 4. Costs and prices

The last published information on the cost of producing wine is for 1939. For that year the manufacturers' value of wine produced was approximately \$33 million, an average of a little over 30 cents per gallon. 4/ Grapes and grape products constituted the most important

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1/ Department of Commerce, Census of Business: 1939, Vol. V, "Distribution of Manufacturers' Sales: 1939," p. 22. Direct sales to retailers were nearly 20 percent. This does not cover sales to bottlers, but on the other hand not all direct sales to retailers represent private brands.

2/ Grapes, Raisins and Wines, p. 312.

3/ Federal Trade Commission, Report on Resale Price Maintenance, 1945, p. 441.

4/ Census of Manufactures: 1939, Vol. II, Part I, p. 224. This figure is for all wine. The average for sparkling wine is much higher, amounting to about \$2 per gallon.

Table 5

Wines by types: number of brands and price range in  
Virginia State stores 1937, 1938 and 1947

(4/5 quart sizes 1/)

Type	Number of brands			Price range					
				July 16, 1937		Oct. 1, 1938		Dec. 1, 1947	
	: 1937	: 1938	: 1947	: High	: Low	: High	: Low	: High	: Low
<u>Domestic</u>									
Sparkling wines:									
Champagne	3	5	6	\$2.05	\$1.90	\$2.05	\$1.50	\$4.00	\$2.40
Sparkling burgundy	1	1	3	1.60	1.60	2.00	2.00	2.95	2.30
Other	2	1	-	1.60	1.35	1.20	1.20	-	-
Still wines (natural):									
Sauternes	8	8	11	.80	.35	.75	.35	1.45	.60
Burgundy	2	2	8	.55	.40	.60	.35	1.45	.55
Claret	7	7	6	.75	.35	.75	.35	1.00	.60
Other	9	6	19	1.00	.50	.65	.50	1.45	.60
Still wines (fortified):									
Port	9	9	23	.80	.40	.75	.40	1.65	.65
Sherry	8	8	23	.80	.40	.75	.40	2.15	.65
Muscatel	6	7	13	.65	.40	.75	.40	1.00	.65
Tokay	6	6	10	.70	.40	.75	.40	1.20	.65
Vermouth	4	4	8	.60	.45	.50	.45	1.10	1.00
Other	1	1	1	.60	.60	.60	.60	.65	.65
Total domestic	66	65	131	-	-	-	-	-	-
<u>Imported</u>									
Sparkling wines:									
Champagne	5	4	4	4.05	3.25	4.10	2.90	5.40	4.10
Sparkling burgundy	1	1	-	3.20	3.20	2.80	2.80	-	-
Other	-	-	-	-	-	-	-	-	-
Still wines (natural):									
Sauternes	5	5	-	1.65	.80	1.50	.90	-	-
Burgundy	4	4	-	2.70	1.45	2.30	1.20	-	-
Claret	7	5	1	1.75	.80	1.65	.90	1.85	1.85
Other	7	7	2	1.70	1.15	1.85	.70	1.80	1.80
Still wines (fortified):									
Port	6	4	6	2.20	.80	2.15	1.00	2.90	1.85
Sherry	8	7	12	2.35	.80	2.30	1.15	4.70	1.95
Muscatel	1	-	-	.80	.80	-	-	-	-
Tokay	-	-	-	-	-	-	-	-	-
Vermouth	3	5	3	1.30	1.15	1.30	1.00	2.00	1.75
Other	1	1	1	1.70	1.70	1.70	1.70	1.80	1.80
Total imported	48	43	29	-	-	-	-	-	-

Treasury Department, Division of Tax Research

Source: TNEC, Investigation of Concentration of Economic Power, Part 6. "Liquor Industry," March 1939, exhibit 433, and Alcoholic Beverage Control Board, Commonwealth of Virginia, List No. 113, effective December 1, 1947.

1/ Where other sizes were priced they have been converted to 4/5 quart. Prices for 1 gallon sizes omitted.



element of cost and amounted to nearly 50 percent of the value of the product. Manufacturing salaries and wages amounted to only 8.5 percent of the value of the product. These costs do not include the cost of bottling, and since most wine under State requirements must be sold in bottled form the cost to the distributor is much higher. In addition most of the wine consumed has to be transported long distances to the eastern market from California. There are no complete figures on bottling costs, but according to information submitted by the industry in 1936 the cost of bottling and casing was equal to twice the price of natural wine at the winery and about 150 percent of the price of fortified wine. <sup>1/</sup> The transportation cost on bulk shipments was from one-third to one-half the price at the winery. On bottled goods the transportation cost was twice that on bulk shipments.

Wine and grape prices tend to move together and producers apparently gain little advantage from low grape prices. <sup>2/</sup> The limited price information available indicates that both wholesale and retail wine prices declined sharply within a few years after repeal. <sup>3/</sup> With the large grape crops in the latter part of the 1930's wine prices remained at a low level until well into the war period. (Table 6) Because of the low grape prices measures were taken in 1938 to divert grapes into the production of brandy to be withheld from the market. The wartime demand removed the surplus of earlier years and as the demand increased prices rose very sharply. Except for 1942 the supply of grapes was also at a high level, but because of the demand for other grape products and diversion of grapes to raisins under Government orders, there was less pressure on the wine market as an outlet for grapes. Although ceilings were imposed on wine prices during the war, producers were permitted to raise prices to cover increased grape costs. Moreover, by shifting from bulk to bottled sales producers earned much higher profits. Since the close of the war grape and wine prices have declined, but still appear to be above the prewar levels.

#### B. Character of demand

Since the repeal of prohibition the pattern of wine consumption has been greatly influenced by the limitation of sales in most States to bottled wine, which sells for much more than the bulk product. It appears that the demand for low-priced wine is now met to a considerable extent by home production. As in the case of other alcoholic beverages taste and social considerations probably play the major role in consumer preference for wine. Non-alcoholic beverages generally are much cheaper than wine. Relative prices may play some part in consumer choice among different alcoholic beverages. This may be most important in the case of fortified wine. This type of wine is comparable in alcoholic strength

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<sup>1/</sup> Grapes, Raisins and Wines, p. 247.

<sup>2/</sup> Ibid., p. 13.

<sup>3/</sup> Ibid., pp. 303 and 307.



Table 6

Annual average price of California new sweet wine in bulk, 1935-1942, and prices in selected months, 1946 and 1947

Year and month	Price per gallon f.o.b. winery <sup>1/</sup>
1935	\$ .37
1936	.35
1937	.37
1938	.32
1939	.29
1940	.32
1941	.30
1942	.35 <sup>2/</sup>
<u>1946</u>	
March	1.16
June	1.23
September	1.23-1.75
December	1.37-1.50
<u>1947</u>	
March	1.00
June	.40-.62
September	.40-.49
December	.42-.53

Treasury Department, Division of Tax Research

Source: Berkeley Bank for Cooperatives.

- <sup>1/</sup> Federal excise tax deducted. Includes California State Marketing Order assessment of 1-1/2¢ per gallon after October 24, 1938.
- <sup>2/</sup> From 1942-1945 ceiling prices were set by the Office of Price Administration. In general increases were allowed over March 1942 prices by the amount of the increase in cost of grapes. The uniform maximum price for California sweet wine, exclusive of Federal excise tax and California marketing assessment, reached a peak of \$1.42 per gallon in December 1944. (Maximum Price Regulation 445, Amendment 20.)

to some types of mixed drinks commonly made from distilled spirits. It accounts for about two-thirds of the consumption of commercially-produced wine.

In the forty years preceding World War I the estimated per capita consumption of wine approximately doubled. <sup>1/</sup> By 1939 the per capita consumption, excluding home-produced wine, was about as large as the estimated per capita consumption 25 years earlier when home production was probably relatively small. <sup>2/</sup> At that time bulk sales were not prohibited and only artificial or imitation wine was subject to tax. From this it would appear that consumers reacted more favorably to the resumption of the sale of wine than to the sale of distilled spirits and beer, the aggregate consumption of which in 1939 did not exceed the pre-prohibition level. Following repeal, the annual increases in wine consumption until 1941 were relatively much larger than the increases in disposable income. <sup>3/</sup> From 1935-1940 the increase in consumption amounted to nearly 100 percent, or three times the increase in disposable income. (Table 7) The wartime disruptions which followed make it impossible to determine whether this indicated a rising trend or the delayed readjustment of consumer patterns to legalized sale of wine. During prohibition the consumption of home-produced wine had developed substantial proportions and at first the price of commercial wine was high. Subsequently prices appear to have declined rather sharply and it is possible that some of the increase in consumption was attributable to reduced prices.

After 1940 wine consumption increased until 1943 and then decreased to near the 1940 level, despite the large increase in disposable income. Consumption was undoubtedly restricted to some extent by limitations on supplies. However, it appears significant that stocks did not decline below the level of the prewar years 1930 and 1940 and remained about equal to annual consumption. (Table 1) It is known that prices rose considerably, but since no reliable price series for wine is available it is not possible to determine whether changes in wine consumption were closely correlated with price changes. <sup>4/</sup>

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<sup>1/</sup> Statistical Abstract, 1946, p. 861.

<sup>2/</sup> Ibid.

<sup>3/</sup> Disposable income represents income payments less personal taxes. Unless otherwise noted, Department of Commerce data on income and expenditures in this study are those issued prior to the revisions published in "National Income," Supplement to Survey of Current Business, July 1947.

<sup>4/</sup> The maximum uniform ceiling prices established in June 1945 were about \$.90 per fifth on natural wines and \$1.30 on fortified wines for California wines at retail in eastern markets, or substantially more than twice the minimum prices in Virginia State stores in 1937-1938. (Federal Register, Vol. 10, pp. 7444 et seq. Amendment No. 25 to Maximum Price Regulation No. 445.)

Table 7

Disposable income, tax-paid withdrawals of wine and consumer expenditures for wine, 1934 - 1946

Year	Disposable income <u>1/</u>			Tax-paid withdrawals			Consumer expenditures	
	Amount	Percentage	Amount	Percentage	Amount	Percentage	of disposable income	Per gallon of wine tax-paid <u>2/</u>
	(billions)	change from preceding year	(millions)	change from preceding year	(millions)	of disposable income		
1934	\$ 51.0	-	33	-	\$ 81	.16 %	\$ 2.45	
1935	56.3	10.4 %	46	39 %	112	.20	2.43	
1936	65.2	15.8	60	30	145	.22	2.42	
1937	69.2	6.1	67	12	160	.23	2.39	
1938	62.9	- 9.1	67	0	161	.26	2.40	
1939	67.7	7.6	77	15	184	.27	2.39	
1940	72.9	7.7	90	17	226	.31	2.51	
1941	88.7	21.7	102	13	283	.32	2.77	
1942	110.6	24.7	113	11	357	.32	3.16	
1943	124.6	12.7	98	- 13	337	.27	3.44	
1944	137.4	10.3	99	1	445	.32	4.49	
1945	139.7	1.7	94	- 5	435	.31	4.63	
1946	146.0	4.5	140 <u>3/</u>	49	645	.44	4.61	

Treasury Department, Division of Tax Research

Source: Department of Commerce, press release of April 30, 1947 and Survey of Current Business, May 1942, April 1944, February 1946 and February 1947. Disposable income and consumer expenditures are from the series published prior to the revision given in Supplement to Survey of Current Business, July 1947. Tax-paid withdrawals: Annual Reports of the Commissioner of Internal Revenue.

- 1/ Disposable income represents income payments less personal taxes.  
2/ Computed on rounded figures.  
3/ This figure may include a substantial amount representing additions to dealers' inventories during this period. Tax-paid withdrawals in the fiscal year 1946 were 114 million gallons and in the fiscal year 1947, 108 million gallons.

Prices of wine began to decline near the end of the war when the price of grapes fell and ceilings were terminated early in 1946. Tax-paid withdrawals in 1946 increased by about 50 percent over 1945 and by about the same percentage over 1940. It is likely, however, that part of this large increase represented a readjustment in wholesale and retail inventories. This tends to be borne out by the large slump which occurred in tax-paid withdrawals in 1947, when they declined to about the 1945 level. The average of tax-paid withdrawals for 1946 and 1947 was only about 30 percent above 1940 while disposable income doubled during this period. This represents a marked change from the rapid expansion in demand just prior to the war, and may indicate that increased prices have curtailed consumption substantially. Retail prices still appear to be more than 50 percent above the prewar level. 1/

### C. Outlook for the industry

Considerable uncertainty is involved in attempting to determine what the future level of wine consumption is likely to be. Except for 1946 the increases over the high level reached in 1940 have not been large. During the first half of 1947 tax-paid withdrawals declined by 44 percent from the corresponding period in 1946, but toward the end of the year had recovered to about the 1946 level. In view of the smaller wine crush in the fall of 1947, however, dealers may have undertaken to build up their inventories. With continuation of high levels of income consumption is likely to be well above the average for the years immediately preceding the war.

Since the close of the war large fluctuations in wine production have again appeared. Production from the 1946 crop was about 40 percent above the 1945 crop. Production in the fall of 1947 declined below the level of 1945, and production from this crop appears to be somewhat less than the current rate of tax-paid withdrawals. Nevertheless, stocks are now larger in relation to withdrawals than in most of the prewar years. In the absence of crop limitations, production in future years is expected to average substantially higher than the prewar level. Grape yields have increased and acreage is slightly larger. 2/ The supply of grapes for wine may also be increased by a reduction in the demand for other grape products. The outlook for exports of raisins and table grapes, heretofore an important part of the market for these products does not appear to be very favorable. 3/ Wine imports

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1/ Based on the prices of less expensive brands in Virginia State stores. (See Table 5)

2/ "Grapes and Grape Products," p. 8. The high yields, however, may not continue.

3/ Ibid., pp. 9-10. This, however, does not take into account possible exports under foreign aid programs.

increased substantially under the pressure of wartime shortages but may be less important in the future. <sup>1/</sup> However, some stimulation of imports is possible as the result of the recent reductions in import duties and the currency revaluation by France.

Although growing concentration of production as well as merchandising efforts designed to establish markets on the basis of brand preference have developed in the industry, price competition appears to be basically important. The effect of price competition on the industry will depend to a large degree on future fluctuations in the supply of wine. A series of years of unusually large production, particularly with adverse demand conditions, might again reduce the industry to the weak position which it experienced prior to the war and lead to severe price competition.

#### V. Effects of the tax

##### A. On profits

It is doubtful whether the increases in tax rates had a very significant effect on the volume of wine sales during the war. Supplies were limited by restrictions on the use of grapes for making wine. Although ceilings were imposed on wine prices, the ceilings established apparently allowed prices to reach about as high a level as consumers were willing to pay. This would indicate that prices exclusive of tax might have risen somewhat more in the absence of the tax increases, particularly in the case of fortified wines which were in greater demand because of the shortage of distilled spirits and which experienced the largest tax increase. Nevertheless, the sales and profits of corporations in the wine industry indicate that producers were in a very favorable position. These data probably represent principally the larger producers, but it is likely that the smaller producers did at least as well. For 1939 more than half of the corporations filing income tax returns operated at a deficit, while for 1943 and 1944 more than three-fourths of the corporations reported net income. (Table 8) For all corporations, sales had increased by about 250 percent from 1939 to 1944 and the ratio of net income before income taxes to sales rose from about 4 percent to about 18 percent. In 1945 the industry experienced a decline in profits from the high level reached in 1944. Since wine is usually distributed in conjunction with distilled spirits, there are no separate data showing profits of wine distributors. However, the aggregate profits of liquor dealers increased greatly during the war. <sup>2/</sup>

The increases in the tax rates on wine during the war were relatively larger than the increase in the tax on beer and generally larger than the increase in the distilled spirits tax. However, the wine taxes before the

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<sup>1/</sup> Ibid., p. 11.

<sup>2/</sup> Part I, Table 8, p. 22.

Table 8

Wine producers: Number of corporation returns, compiled receipts, net income or deficit, and income taxes, 1938-1945

(Dollar amounts in millions)

Year	Total number of returns	Returns with net income					Returns with no net income		
		Number of returns	Total compiled receipts	Net income	Income taxes <sup>1/</sup>	Income after taxes	Number of returns	Total compiled receipts	Deficit
1938	169	66	\$ 23.6	\$ .8	\$ .1	\$ .7	103	\$ 8.8	\$ .8
1939	158	73	26.8	1.7	.3	1.4	85	6.2	.5
1940	160	89	38.1	2.9	.9	2.0	71	4.7	.4
1941	151	87	47.3	4.1	1.7	2.4	64	5.0	.5
1942	159	115	64.0	6.3	3.4	2.9	44	4.6	.3
1943	154	131	106.2	16.2	10.6	5.5	23	1.3	.2
1944	149	116	111.6	21.0	14.4	6.6	33	3.2	.2
1945	147	95	112.6	11.8	7.1	4.7	52	45.7	4.3

Treasury Department, Division of Tax Research

Source: Statistics of Income, Part 2.

<sup>1/</sup> Including excess-profits taxes.



war were much lower than the taxes on other alcoholic beverages, both on the basis of physical volume and in relation to price. In 1938 the tax represented substantially less than 5 percent of the eastern retail price of most domestic still wines. <sup>1/</sup> The Federal tax now represents about 5 percent of the lowest priced brands on wines of lower alcoholic content, but ranges from 10 to 20 percent on fortified wines. <sup>1/</sup>

Wine prices have increased by much more than the amount of the tax. The present tax on still wines containing not over 14 percent alcohol is such a small proportion of the price that it cannot be considered a serious deterrent to sales. The tax on wine of higher alcohol content is a more important element in price. Nevertheless, even for this class of wine the tax is so much lower than the tax on distilled spirits that some consumers may purchase fortified wines as a substitute for distilled spirits. As the result of the profitable war years the industry is in a stronger financial position than it was before the war. However, prices appear to have declined by more than 50 percent since the end of the war. (Table 6) Although grape prices have also declined, it is probable that profits have been reduced substantially.

Because of the extreme fluctuations to which it is subject, the industry's position might be weakened in a relatively short time. Since this would tend to stimulate price competition and distress sales, it might be difficult under such conditions for the producers of wine and the growers of grapes to shift the tax forward to consumers.

#### B. On competition

To the extent that consumers would normally prefer wine to non-alcoholic beverages the present tax affects the competitive position of the industry unfavorably. However, the present relationship in the tax rates on alcoholic beverages tends to favor wine over beer and distilled spirits. It is not clear whether this advantage is sufficient to result in any substantial shift in consumption from the other alcoholic beverages to wine. It is possible that relative prices may not be an important factor in consumer choice of alcoholic beverages. The existence of taxes on wine, however, favors home production of wine.

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<sup>1/</sup> Based on prices shown in Table 5 relating to bottles containing 4/5 quart. The price on larger-sized containers is usually substantially lower. The tax is higher in relation to the prices at which wine is sold on the West Coast. Moreover, the ratio will differ with the amount of taxes imposed by State and local governments, or the amount of the mark-up made by State monopolies. For information on State taxes, see Treasury Department Study, "Federal-State Tax Coordination," July 1947.

A specific tax usually affects some producers more adversely than others. Although the higher rates generally apply to the more expensive classes of wines, the specific tax tends to affect unfavorably the producers of the lower-priced products in each class of wine. Some of the larger producers market their products in different price ranges and on the whole are less affected than the smaller producers who may sell their product in bulk at low prices. A few of the smaller producers have been able to develop a market for higher-priced products under their own brand names. The specific tax also tends to benefit the higher-priced imported wines.

C. On consumers

Reported data on consumer expenditures for wine in relation to the size of consumer incomes do not appear to be sufficiently complete to afford a reliable indication of the distribution of the tax burden. 1/ The present tax is somewhat lower in relation to expenditures for high-priced wines than it is for low-priced wines. Two factors, however, suggest that the tax borne by consumers may be higher in proportion to income in the upper income groups than in the lower income groups. First, it is likely that consumers in the lower income groups may satisfy their demand for wine to a substantial extent from production of wine in the home, which may be as large as one-fourth of total consumption. Second, lower per capita consumption of wine than of beer and soft drinks may indicate that the lower income groups are relatively less important consumers of wine.

Since wine is not included in the Consumers' Price Index of the Bureau of Labor Statistics, the taxes on wine do not affect the level of this Index.

There is no clear relationship between fluctuations in the consumption of wine and changes in disposable income. Fluctuations in the consumption of wine were generally larger than corresponding changes in disposable income prior to the war. Since that time, however, wine consumption has not been closely related to changes in income. Further experience is necessary to determine whether the tax collected from this source would tend to fluctuate more or less than changes in disposable income.

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1/ Data for 1941 expenditures are reported in Department of Labor, Family Spending and Saving in Wartime, Bulletin No. 822, 1945, p. 78, but it is indicated that in the survey consumers may have understated their expenditures for alcoholic beverages by as much as two-thirds. Expenditures for wine as reported were proportional to the size of the family income for incomes under \$5,000.

#### VI. Administration and compliance

The wine tax is collected from about 900 taxpayers, which is larger than the number in either the brewing or distilling industries. The Government supervision required in the collection of the wine tax is greater than in the collection of the tax on beer but less extensive than it is for distilled spirits. Nevertheless, since the wine taxes are much lower the revenue from wine is not as high in relation to the cost of supervision as the revenue from the other alcoholic beverages. The enforcement problems which arise under the wine tax are much less serious than under the distilled spirits tax, but some evasion of wine taxes occurs where wine produced ostensibly for home consumption is sold.

#### VII. Technical problems

The principal technical problems which arise under this tax are:

1. The determination of rates to be applied to different types of wines.
2. Whether floor stocks taxes should be imposed or refunds made on floor stocks, if the tax rates are changed.

##### A. Rates for different types of wine

There are substantial differences in the prices of different classes of wines. These differences may account to some extent for the differentiation in tax rates which has prevailed since 1916. The differences have changed from time to time, but the rates on still wines have been consistently lower than the rates on sparkling wines and still wines of lower alcoholic content have been favored over those of higher alcoholic content. The average prices, exclusive of tax, for the different classes of wine show a similar relationship. However, there does not appear to have been any clear effort to set the tax rates in such a way that they would bear the same ratio as the prices for the different classes of wine.

If the tax rates were to be made proportional to the average prices for the different classes of wine, the present rates would have to be changed considerably. In Eastern markets the present retail price, excluding tax, appears to be very little higher on fortified wines than on the lower-alcoholic-content table wines. <sup>1/</sup> The present tax ratio,

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<sup>1/</sup> Based on prices in Virginia State Stores (See Table 5 ).

however, is four to one, respectively. There may be some basis for a relatively higher tax rate on fortified wine because its characteristics are similar to certain distilled spirits, particularly cordials and liqueurs. Natural wines are limited more largely to use as a mealtime beverage, from which the term "table wine" derives. The higher rates on sparkling wines than on still wines may have been influenced by the former importance of imports of sparkling wines. At present about 80 percent of sparkling wine consumption is supplied by domestic producers. The present tax on sparkling wines is approximately five times as high as the tax on still wines, in terms of physical volume, but for the less expensive brands of each the price is only two or three times as high.

#### B. Floor stocks taxes and refunds

Since the enactment of the taxes on wine in 1914, increases in tax rates have been accompanied by taxes on floor stocks under the Revenue Acts of 1918, 1941, 1942 and 1943. No such taxes were imposed in connection with the rate increases in 1914, 1916, 1917 or 1940. If a floor stocks tax is not imposed when the tax rate is increased, there is incentive to accumulate stocks. Wine may be held for long periods without deterioration after it has been bottled. Stocks of wine in relation to consumption are not as large as stocks of distilled spirits but withdrawals in anticipation of a tax increase might approximate a year's consumption. The advantage to be gained from withdrawing stocks before the tax increase would depend upon the size of the increase. If the increase were large, there would be a considerable loss in revenue and substantial windfalls would be obtained by producers and dealers best able to finance the tax payments involved.

The rates on wines have been reduced by the Revenue Act of 1928 and by the Liquor Tax Administration Act of 1936, but in neither case was provision made for refunds on floor stocks tax-paid at the old rate. Because of the prohibition of beverage sales in 1928, only small tax-paid stocks existed in connection with sales for religious purposes. In 1936 the reduction was only 5 cents per gallon on natural wines and 10 cents per gallon on fortified wines. The present law provides for refunds on floor stocks to the extent of the reduction in the War Tax Rate, i.e., the amount by which the rate was increased by the Revenue Act of 1943. <sup>1/</sup> This is 5 cents per gallon on natural wines, 20 cents per gallon on fortified wines and 5 cents per half-pint on sparkling wines.

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<sup>1/</sup> Revenue Act of 1945, Section 302. The refund provision was made permanent by the Excise Tax Act of 1947.

The importance of a refund on floor stocks depends upon the size of the tax reduction and the condition of the industry at the time of the reduction. A reduction of 5 or 10 cents per gallon represents such a small change in terms of the  $\frac{4}{5}$  quart bottle usually sold at retail that it would not necessarily be reflected in lower retail prices until after retail tax-paid stocks had been disposed of. A substantially larger change in tax might produce a change in retail prices before existing stocks were disposed of. Retail dealers' inventories of still wines appear to represent about the same proportion of sales as distilled spirits. Their floor stocks reported in 1941 and 1942 amounted to about 14 percent of tax-paid withdrawals for the respective years and in 1944 to about 17 percent. (Table 9) Stocks of sparkling wines are larger in relation to sales. (Table 10) In most cases retailers do not deal exclusively in wines. Moreover, wine sales are usually such a smaller proportion of a retail liquor dealer's business that the lower mark-up which might result from absorbing a reduction in wine taxes probably would not affect the dealer's total profits appreciably. In the case of producers and distributors even a small tax reduction would tend to be reflected in lower prices on their sales of stocks tax-paid at the higher rate. Tax-paid stocks of distributors were nearly as large as retailers' stocks in relation to sales at the time floor stocks tax returns were filed in 1941, 1942 and 1944, but producers' tax-paid stocks were relatively very small. (Table 9)

The payment of refunds on floor stocks would involve about 400,000 returns, if all dealers filed claims for refund. Most of the returns would be filed by retailers from whom returns are not required in the collection of the tax. In addition to the problem of checking the large number of special returns and preparing refunds, the administration of floor stocks refunds would involve greater possibility of fraud than the collection of floor stocks taxes. The problems could be limited by confining refunds to distributors and producers, who would tend to be more adversely affected than retailers if refunds were not provided. In case a reduction in wine taxes occurred at the same time as a reduction in the tax on distilled spirits, both taxes probably should be treated in the same manner. Most dealers in distilled spirits handle wine, although all wine dealers do not sell distilled spirits.



Table 9

Still wines: Tax-paid floor stocks in possession of producers and distributors on date of imposition of floor stocks taxes under Revenue Acts of 1941-1943 <sup>1/</sup>

(In thousands of wine gallons)

	: October 1, : 1941	: November 1, : 1942	: April 1, : 1944
Stocks			
Retail dealers	13,627	15,046	15,628
Wholesale dealers, including importers	12,185	13,135	13,069
Winemakers, rectifiers, etc.	1,203	1,085	981
Other	148	2,144	167
Total	27,163	31,409	29,845
Percent of total held by:			
Retail dealers	50.2 %	47.9 %	52.4 %
Wholesale dealers, including importers	44.9	41.8	43.8
Winemakers, rectifiers, etc.	4.4	3.5	3.3
Other	.5	6.8	.6
Total	100.0	100.0	100.0
Tax-paid withdrawals during calendar year	98,428	110,029	94,036
Stocks as a percent of tax-paid withdrawals:			
Retail dealers	13.8 %	13.7 %	16.6 %
Wholesale dealers, including importers	12.4	11.9	13.9
Winemakers, rectifiers, etc.	1.2 <sup>2/</sup>	1.0 <sup>2/</sup>	1.1 <sup>2/</sup>
Other	.2 <sup>2/</sup>	1.9 <sup>2/</sup>	.2 <sup>2/</sup>
Total stocks	27.6	28.5	31.7

Treasury Department, Division of Tax Research

Source: Unpublished data of Alcohol Tax Unit, Bureau of Internal Revenue.

<sup>1/</sup> Includes vermouth

<sup>2/</sup> As percent of domestic withdrawals only.



Table 10

Sparkling wines: Tax-paid floor stocks in possession  
of producers and distributors on date of imposition  
of floor stocks taxes under Revenue Acts of 1941-1943

(In thousands of half-pint units)

	:October 1, : 1941	:November 1, : 1942	: April 1, : 1944
Stocks:			
Retail dealers	7,235	7,223	11,358
Wholesale dealers, including importers	6,121	6,956	5,524
Winemakers, rectifiers, etc.	269	310	80
Other	1	490	16
Total	13,627	14,980	16,978
Percent of total held by:			
Retail dealers	53.1%	48.2%	66.9%
Wholesale dealers, including importers	44.9	46.4	32.5
Winemakers, rectifiers, etc.	2.0	2.1	.5
Other	*	3.3	.1
Total	100.0	100.0	100.0
Tax-paid withdrawals during calendar year	20,435	18,355	29,633
Stocks as a percent of tax-paid withdrawals:			
Retail dealers	35.4%	38.3%	38.3%
Wholesale dealers, including importers	30.0	36.9	18.6
Winemakers, rectifiers, etc.	1.5 $\frac{1}{1}$	1.8 $\frac{1}{1}$	.3 $\frac{1}{1}$
Other	* $\frac{1}{1}$	2.9 $\frac{1}{1}$	.1 $\frac{1}{1}$
Total stocks	66.7	79.4	57.3

Treasury Department, Division of Tax Research

Source: Unpublished data of Alcohol Tax Unit, Bureau of Internal  
Revenue.

$\frac{1}{1}$  As percent of domestic withdrawals only.

\* Less than .05 percent.

PART IV - Excise Tax on Rectified Spirits and Wines 1/

I. Description of the tax

The tax applies generally to the purifying or refining, or the mixing, of distilled spirits or wines. The tax is payable in addition to the gallonage taxes applicable to the production of distilled spirits and wines. It is levied on the basis of the proof gallon. 2/

The principal exemptions provided under the tax are:

1. Gin produced by the redistillation of neutral spirits over juniper berries or other aromatics.
2. Cordials and liqueurs made from spirits and fortified wine.
3. Wines which are mixed or blended solely for the purpose of perfecting them according to commercial standards.
4. Blends of straight whiskies aged for not less than four years or brandies aged for not less than two years. 3/
5. The extraction of water from high-proof spirits to produce absolute alcohol.

The tax is paid by purchasing stamps to be affixed to the packages of products rectified and is payable upon removal of the product from the rectifying process.

II. Changes in tax rate

The rectification tax was first imposed by the Revenue Act of 1917, at the rate of 15 cents per proof gallon, effective November 2, 1917. The rate was increased to 30 cents per proof gallon by the Revenue Act of 1918, effective February 25, 1919, and has not been changed since.

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- 1/ In addition to the excise tax certain special taxes are imposed on rectifiers, but these are not considered in this analysis.
  - 2/ The proof gallon or gallon of proof spirits is one "which contains one-half its volume of alcohol of a specific gravity of ... (.7939) at sixty degrees Fahrenheit" (Internal Revenue Code, Section 2809).
  - 3/ Provided the product is not reduced below 90 proof and no coloring, flavoring matter or substance other than pure water is added.

### III. Revenue collections, 1936-1947

Collections from this tax are small compared with the revenue from the taxes on the production of distilled spirits and beer. However, for the fiscal year 1947 the yield of the rectification tax was nearly as large as the revenue from wine taxes.

#### Excise tax collections, fiscal years 1936-1947

(In millions)

Fiscal year	Collections	Fiscal year	Collections
1936	\$ 7.9	1942	\$ 17.2
1937	11.0	1943	18.8
1938	10.8	1944	18.9
1939	10.7	1945	32.5
1940	11.9	1946	41.9
1941	13.5	1947	43.5

### IV. Economic background of the industry

What constitutes rectification is determined by a number of technical tests, but in general it consists of changing the composition and character of the products. <sup>1/</sup> In the fiscal year 1947 nearly 90 percent of the products produced by taxable rectification processes consisted of whisky. (Table 1) Most rectified whisky is produced by mixing unaged spirits with aged whisky to obtain a blended whisky or spirit blend. A small part consists of mixing different whiskies that cannot be blended free of the rectification tax. The principal remaining rectified products are gin, cordials, liqueurs and brandy. Although the law provides for exemption of distilled gin from the rectification tax, a considerable amount of gin is produced by other processes to which the tax applies.

Prior to prohibition as much as two-thirds of the tax-paid distilled spirits produced in this country were rectified. (Table 2) In the early

<sup>1/</sup> The Internal Revenue Code, Section 3254(g) provides: "Every person who rectifies, purifies, or refines distilled spirits or wines by any process other than by original and continuous distillation from mash, wort or wash, through continuous closed vessels and pipes, until the manufacture thereof is complete ---- shall be regarded as a rectifier ----."

Table 1

Production of rectified spirits and  
wines by types, fiscal years 1936 - 1947

(Thousands of proof gallons 1/)

Fiscal year	Total	Whisky	Gin	Cordials and liqueurs	Brandy	Other <u>2/</u>
1936	32,449	21,727	6,767	3,118	93	744
1937	44,311	31,587	8,148	3,813	79	684
1938	43,560	32,676	7,664	2,722	34	465
1939	43,401	33,593	7,232	2,193	58	326
1940	47,657	37,977	6,666	2,438	74	301
1941	54,158	44,317	6,765	2,542	185	349
1942	67,771	55,962	7,598	3,228	366	617
1943	70,125	60,795	2,965	3,966	1,362	1,038
1944	67,686	57,862	898	3,985	1,515	3,425
1945	118,863	101,645	7,058	6,687	1,677	1,796
1946	150,879	124,727	11,498	11,309	1,942	1,403
1947	148,560	130,701	10,547	4,546	1,678	1,089

Treasury Department, Division of Tax Research

Source: Annual Report of the Commissioner of Internal Revenue, fiscal year 1947, p. 179.

- 1/ The proof gallon or gallon of proof spirits is one "which contains one-half its volume of alcohol of a specific gravity of ... (.7939) at sixty degrees Fahrenheit" (Internal Revenue Code, Section 2809).
- 2/ Includes rum, wine and a number of miscellaneous products.

Table 2

Domestic distilled spirits: Tax-paid withdrawals and amount used for rectification, fiscal years 1912-1918, and 1935-1947

Fiscal year	Tax-paid withdrawals 1/ (Thousands of tax gallons 3/)	Used for rectification 2/	Percent of withdrawals rectified 4/
1912	135,544	92,014	67.9
1913	142,895	94,174	65.9
1914	138,841	91,810	66.1
1915	123,861	78,619	63.5
1916	135,856	83,999	61.8
1917	164,292	99,050	60.3
1918	90,088	49,781	55.3
1935	75,074	23,669	31.5
1936	100,383	32,817	32.7
1937	120,011	45,249	37.7
1938	114,926	43,988	38.3
1939	114,578	43,683	38.1
1940	128,326	47,581	37.1
1941	130,552	54,509	41.8
1942	144,208	68,021	47.2
1943	136,837	71,021	51.9
1944	90,464	57,641	63.7
1945	142,331	110,364	77.5
1946	178,131	147,450	82.8
1947	173,505	146,679	84.5

Treasury Department, Division of Tax Research

Source: Annual Reports of the Commissioner of Internal Revenue.

- 1/ Includes tax-paid alcohol used for non-beverage purposes, not reported separately. The amount so used has probably been between five and seven million proof gallons since 1935.
- 2/ Includes imported spirits for the years prior to 1944, not reported separately. It is believed that the amount of imports included in those years, however, was relatively small compared with amounts excluded for the years 1944-1947.
- 3/ A tax gallon for spirits of 100 proof or over is equivalent to the proof gallon. For spirits of less than 100 proof the tax gallon is equivalent to the wine gallon. Spirits used for rectification for the years 1935-1947 are reported in proof gallons. The proof gallon or gallon of proof spirits is one "which contains one-half its volume of alcohol of a specific gravity of ... (.7939) at sixty degrees Fahrenheit."
- 4/ Computed on unrounded figures.

years following repeal the proportion was only about one-third. The proportion increased somewhat prior to the war but during the war the production of rectified whisky was greatly stimulated by the limitations on the production of whisky. In the fiscal year 1947 the proportion of distilled spirits rectified reached a peak of nearly 85 percent. (Table 2)

The number of rectifiers is larger than the number of distillers producing spirits from grain. However, the number now is much smaller than it was prior to prohibition and there was a decrease of 40 percent between 1934 and 1944. <sup>1/</sup> Shortly after the resumption of legal sale of beverage spirits all of the largest distillers engaged in rectification. Many of the smaller distillers do not operate rectification plants. In the fiscal year 1947 the four largest distillers accounted for nearly 80 percent of the rectified whisky bottled. <sup>2/</sup>

The future importance of rectification is difficult to predict. The predominant sale of whisky blends since the early war years may tend to have a lasting effect on consumer tastes. Prior to about 1940 when stocks of 4-year old whisky were limited a considerable amount of whisky less than four years old was marketed as straight whisky. The availability of aged whisky tends to result in larger sales of blended whisky because by using a substantial proportion of unaged spirits the blended product can be sold at a price substantially below the price of straight whisky which has been aged two or three years. Consequently, significant changes in the supply of aged whisky are likely to result in changes in the proportion of whisky rectified.

#### V. Effects of the tax

The present rectification tax of 30 cents per proof gallon is only a little more than 3 percent of the present tax of \$9 per proof gallon on the production of distilled spirits. The rectification tax is a still smaller percentage of the retail price of rectified spirits. Under the present ratio between the rectification tax and the production tax it is doubtful whether the sale of rectified products is affected appreciably compared with non-rectified products. Under the prewar ratio, when the rectification tax was about 15 percent of the production tax, the production of rectified spirits may have been restricted to some extent by the tax. <sup>3/</sup>

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<sup>1/</sup> Annual Reports of the Commissioner of Internal Revenue.

<sup>2/</sup> Unpublished data of the Bureau of Internal Revenue.

<sup>3/</sup> The ratio of rectified gin (taxable) to distilled gin (tax-exempt) is now somewhat higher than it was prior to July 1, 1940 when the tax on distilled spirits was \$2.25 per proof gallon. The relative increase in rectified gin, however, may be due to other factors.



The imposition of a tax on rectification tends to reduce the relative price difference between the lower and the higher priced distilled spirits. Most whisky subject to the rectification tax is lower priced because of the large proportion of low cost unaged spirits. The rectification tax by falling more heavily on the lower priced products adds to the regressive effect of the production tax on distilled spirits, which is imposed on a specific basis. <sup>1/</sup> From the point of view of the consumer, it would be more equitable, in the case of whisky, to place the tax on the non-rectified product. The considerations which led to the taxation of rectified spirits are not apparent from the hearings and reports at the time the tax was enacted. <sup>2/</sup>

If the rectification tax causes a shift in consumption away from rectified products, it affects some groups in the industry more than others. At the present time almost all (over 94 percent) of the whisky sold by the larger companies is rectified. About 70 percent of the production of the remaining companies is rectified, but a number of the smaller companies produce no rectified products.

A rectification tax also involves a certain amount of discrimination in borderline cases. An insubstantial difference may determine whether the tax applies or not. This is illustrated by the dividing lines on age and proof provided under the law with respect to brandy and whisky. Moreover, the addition of a slight amount of coloring would make the product taxable, although it may not be sufficient to affect the designation of the class and type of product under provisions of the Federal Alcohol Administration Act. There are also differences in the treatment of wine products according to the process used.

#### VI. Administration and compliance

Certain problems arise in the administration of the rectification tax. Most of the work involved at present in the supervision of rectification plants, however, would continue in the absence of a rectification tax. This supervision is necessary to protect the revenue from the basic production tax. Similar supervision is required at tax-paid bottling houses, where spirits are bottled without rectification. The principal problems created by the rectification tax, both for taxpayers and the Bureau, relate to the determination of whether a process is taxable or not. Taxpayers must submit information regarding their formulae and processes to the Bureau of Internal Revenue and provide supplemental information when any change is made. The Bureau has to review this information and in some cases make chemical tests in order to pass upon the taxability of the process.

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<sup>1/</sup> See p. 25 supra.

<sup>2/</sup> It may be assumed that revenue considerations were of some importance, the yield of the proposed tax of 15 cents per gallon being estimated at from \$5 to \$7 $\frac{1}{2}$  million. (House of Representatives, Report No. 45, 65th Cong., 1st Sess., p. 55, and Senate Report No. 103, p. 70.) In the hearings the tax was strongly opposed by some members of the industry. (Hearings and Briefs before the Committee on Finance on H.R. 4280, 65th Cong., 1st Sess., p. 93.) In the hearings on the Revenue Act of 1916, a member of the industry indicated that a rectification tax had been suggested in the past to cover the cost of supervision by the Bureau of Internal Revenue, but that since then all gauging and stamping at rectifying houses had been transferred to the rectifiers. (Briefs and Statements filed with the Committee on Finance on H.R. 16763, 64th Cong., 1st Sess., pp. 179-182.)

PART V - Comparison of Taxes on Alcoholic Beverages in  
the United States, Canada and United Kingdom

I. Limitation on comparisons

International comparisons of excise taxes present numerous difficulties. The form in which the taxes are imposed may not be the same for each country, the products taxed may not be strictly comparable, while differences in internal prices and consumption patterns prevent an accurate indication of the relative burden of the taxes compared. In general, the taxes in the three countries applicable to alcoholic beverages are imposed on the finished product. In some instances, however, it has been necessary to derive the tax for the finished product from the tax imposed on materials used in order to place the taxes of the three countries on a comparable basis. Where there are a number of rates of tax reflecting minor variations in the products, comparisons have been limited to the principal classes of products.

With these limitations the comparisons presented below can be used as an approximation of the taxes imposed on alcoholic beverages by the central governments in the three countries. Customs duties have not been considered except where a substantial portion of the product consumed is imported. The comparisons presented do not take into account State excises and sales taxes in the United States, Provincial sales and excise taxes in Canada, the Canadian Dominion manufacturers' sales tax of 8 percent, and the British Purchase Tax. No attempt has been made to compute the burden of occupational taxes or license fees on producers and distributors. Conversion of foreign taxes to United States dollars has been made on the basis of official rates of exchange. <sup>1/</sup>

II. Types of taxes levied on alcoholic beverages

A. Canada

The Canadian excises on alcoholic beverages, as in the United States, are imposed at specific rates without reference to the price of the products. However, in the case of beer two different methods of taxation are employed depending upon the materials used. With this exception the statutory rates are comparable with those in the United States. The present rates are as follows:

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<sup>1/</sup> The official rate on the British pound is \$4.03, but for convenience conversion is made on basis of an even \$4.00. Since the official rate of exchange on the Canadian dollar is at par no conversion is necessary in this case.

	<u>Amount of tax a/</u>	
	<u>In Canadian units</u>	<u>In United States units b/</u>
<u>Distilled spirits (proof gallon)</u>		
General rate	\$ 11.00	\$ 8.03
Canadian brandy	9.00	6.57
<u>Beer</u>		
Brewed in whole or in part from any substance other than malt (gallon)	.45	.37
Malt (pound)	.16	.16
Malt syrup c/ (pound)	.24	.24
<u>Wine (gallon)</u>		
Still wine containing not more than 40° proof	.50	.42
Sparkling wine	2.50	2.08

Sources: Distilled spirits and beer: 7 George VI, chapter 9, An Act to Amend the Excise Act, 1934, Sec. 41 and p. 97.  
Wine: Excise Tax Act, 1947, Sec. 83(a) and (b).

- a/ Under Canadian law, distilled spirits and beer are subject to "excise duty," while wine is subject to "excise tax."  
b/ The United States proof gallon is equivalent to .73 Canadian proof gallon. The United States gallon for wine and beer is equivalent to .833 Canadian gallon. The Canadian dollar has been converted at par.  
c/ The rate on imported malt syrup is 40 cents per pound.

Since the Canadian excise on spirits varies with the proof of the product, it may be compared with the United States tax after allowance for the differences in the content of a gallon and the standard of proof. 1/ The general rate is probably fairly representative of the tax paid, as Canadian brandy constitutes only a small proportion of the spirits consumed. 2/

Beer produced from grain and malt in Canada appears to be comparable with the beer generally produced in the United States. However, the excise on this type of beer is higher than on beer produced from malt or malt syrup without other grain materials. The most common type of beer

- 1/ The Canadian standard proof is 57.1 percent alcohol by volume compared with 50 percent in the United States.  
2/ Distilled spirits used for non-beverage purposes in Canada are taxed at rates ranging from 15 cents to \$1.50 per Canadian proof gallon, 11 cents to \$1.10 per United States proof gallon, depending upon the purposes for which they are used.

in Canada appears to be that produced from malt alone, utilizing the equivalent of 1.75 pounds of malt per United States gallon. <sup>1/</sup> On such beer the excise would be 28 cents per United States gallon or \$8.68 per barrel of 31 gallons.

The Canadian excise on still wine is the same rate for different degrees of alcoholic content. The maximum strength to which a wine may be fortified is 40 degrees Canadian proof spirit. <sup>2/</sup> This is equivalent to 22.8 percent alcohol by volume, or slightly higher than the alcoholic content of most of the fortified wine consumed in the United States.

The Canadian tax on sparkling wine makes no differentiation between artificially carbonated and natural wine.

#### B. United Kingdom

As in the United States and Canada, the British taxes are imposed at specific rates without reference to the price of the products. On spirits and beer the taxes are shown only for domestic products, which represent most of the consumption. <sup>3/</sup> Customs duties on imported spirits and beer differ depending upon the origin and the type of product. Since the consumption of wine in each of the three categories, domestic, Empire and non-Empire, is substantial, however, the rates are shown for each of these products. <sup>4/</sup> The rates on the principal types of alcoholic beverages consumed in the United Kingdom are shown below, on the basis of the new rates announced by the Chancellor of the Exchequer on April 6, 1948. While in most cases the rates were increased, lower rates were provided on some imported wines in accordance with the Geneva trade agreements.

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<sup>1/</sup> Based on information received from the Commissioner of Excise in February 1943. The proportion may have changed since that time.

<sup>2/</sup> Circular No. 220-C, 2nd Revision, September 8, 1938.

<sup>3/</sup> G. Findlay Shirras and L. Rostas, The Burden of British Taxation, Cambridge, 1943, pp. 144, 145.

<sup>4/</sup> Ibid., p. 140.

	<u>Amount of tax</u>			<u>United States gallon a/</u>
	<u>Imperial gallon</u>			
	<u>L</u>	<u>s</u>	<u>d</u>	
<u>Distilled spirits, including cordials and liqueurs (proof gallon)</u>	10	10	10	\$ 30.78
<u>Beer b/</u>				
Worts of a specific gravity of 1027° or less	0	5	0	.83
Each additional degree over 1027	0	0	2	.03
<u>Still wines</u>				
Domestic				
Not exceeding 27° proof	1	2	6	3.75
Exceeding 27° proof	1	10	6	5.08
Imported, Empire products				
Not exceeding 27° proof	1	3	0	3.83
Exceeding 27° proof and not exceeding 42° proof	2	0	0	6.66
For every degree or fraction thereof above 42°	0	3	4	.56
Bottled, additional duty	0	1	6	.25
Imported, non-Empire products				
Not exceeding 25° proof	1	5	0	4.17
Exceeding 25° and not exceeding 42° proof	2	10	0	8.33
For every degree or fraction thereof above 42°	0	4	2	.69
Bottled, additional duty	0	2	6	.42
<u>Sparkling wines c/</u>				
Domestic	1	8	6	4.75
Imported, Empire products	1	15	6	5.91
Imported, non-Empire products	1	17	6	6.25

Source: Financial Statement, (1943-49)

- a/ The United States wine gallon is equivalent to .833 Imperial gallon and the United States proof gallon is equivalent to .73 Imperial proof gallon. British currency converted to dollars on the basis of \$4 to the Pound.
- b/ The duty is imposed on the basis of a barrel of 36 Imperial gallons.
- c/ The duty on sparkling wine is the sum of the duty on still wine and an additional duty for sparkling wine. For convenience the two duties have been combined. It is assumed that the duty on still wine of lower alcohol content is applicable to sparkling wine.



The standard rate on domestic distilled spirits is applicable to spirits which have been warehoused for not less than 3 years. Immature spirits are subject to an additional duty. 1/ It has been assumed that most of the spirits consumed have been aged for 3 years or more. Since the excise varies with the proof of the spirits it may be compared with the United States and Canadian taxes by making the necessary allowance for differences in the content of the gallon and the standard of proof. 2/

Inasmuch as the tax on beer varies with the specific gravity of the worts, 3/ the rate would depend on the character of beer selected for comparison. Apparently the worts used in beer consumed in the United States have a higher specific gravity on the average than the British. For the typical United States beer the specific gravity of the worts would be about 1055 degrees. For such beer the British tax would be \$1.69 per United States gallon, or \$52.29 per barrel of 31 United States gallons. However, the average gravity of beer consumed in the United Kingdom in 1940-1941 was 1038 degrees. 4/ The tax on such beer would be \$1.17 per United States gallon or \$36.13 per barrel of 31 gallons. Since it appears to be representative of the tax paid in the United Kingdom it probably should be used for comparative purposes.

On the basis of prewar information about 50 percent of the wine consumed in the United Kingdom was obtained from non-Empire sources and the balance about equally from Empire and domestic production. 5/

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- 1/ Thirty-Eighth Report of the Commissioners of His Majesty's Customs and Excise for the year ended 31st March 1947, pp. 36, 37. Where duty-paid spirits have been used in the manufacture of recognized medical preparations or for scientific purposes, repayment is allowed under Section 4 of the Finance Act, 1918, of any duty paid in excess of that in force before 1918, when the basic rate was 14s. 9d. per proof gallon. A corresponding reduction of duty is made in respect of spirits contained in imported medical preparations. Domestically produced spirits used for industrial or scientific purposes, or for domestic heating, cleaning, etc., are generally exempted from duty, while imported spirits used for such purposes in some instances are subject to a small customs duty.
- 2/ The British standard of proof is 57.1 percent alcohol by volume compared with 50 percent in the United States.
- 3/ The wort is the liquid obtained after the grain has been converted to starch but before fermentation of the mash. It is assumed that approximately one gallon of beer is obtained from a gallon of worts.
- 4/ Shirras and Rostas, op. cit., p. 114.
- 5/ Report of the Commissioners, op. cit., pp. 57-66.



However, it appears that the proportions were not the same for the different classes of wine. Information on domestic still wine is not available according to alcoholic content. Most of the imported still wine of the lowest alcoholic content was obtained from non-Empire sources. An average of the domestic and non-Empire rates for these products, or \$3.96 per U. S. wine gallon, is assumed to be representative of the tax on this class of wine. <sup>1/</sup> In the case of sweet or fortified wine it appears that about two-thirds of the imports was non-Empire and the balance Empire. On the basis of these proportions the average tax would be \$7.77 per U. S. wine gallon for this class of wine. Since imports of still wine in bottles are relatively small, the rate for bulk imports is used.

As in the United States, sparkling wine represents a very small part of total wine consumption in the United Kingdom. Since most of it is imported from non-Empire sources, the full rate of \$6.25 per U. S. wine gallon is used.

### III. Comparison of taxes for selected products

The comparisons below are presented on the basis of the typical package size retailed in the United States. In general, the amount of tax varies with the size of the unit and can be converted directly to other size units. For distilled spirits and still wine, where the amount of tax depends upon the alcoholic content of the product, the comparison is shown on the basis of the proportion of alcohol representative of the products retailed in the United States.

The comparative taxes imposed on each of the principal types of alcoholic beverages by the three countries are as follows:

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<sup>1/</sup> The upper limit of alcoholic content for this class of wine is slightly higher than the upper limit in the United States.

	<u>Amount of tax</u>		
	<u>United States</u>	<u>Canada</u>	<u>United Kingdom</u>
<u>Distilled spirits</u> - 4/5 quart 85 proof	\$ 1.58 <u>a/</u>	\$ 1.37	\$ 5.23
<u>Beer</u> - 12-ounce bottle	2.4¢	2.6¢	11.0¢
<u>Still wine</u> - 4/5 quart			
Alcoholic content of 12%	3¢	8¢	79¢
Alcoholic content of 20%	12	8	\$ 1.55
<u>Sparkling wine</u> - 4/5 quart			
Natural	60¢ (	42¢	\$ 1.25
Artificially carbonated	40 (		

a/ Includes 5 cents for rectification tax. The bulk of the distilled spirits in the United States is subject to this tax.

\* \* \*

APPENDIX

Special taxes relating to distilled spirits, fermented malt liquors and wine, as of December 31, 1947

Description	:	Amount
<u>Occupational taxes</u>		
Distilled spirits or wine		
Wholesale dealers		\$110 per annum
Retail dealers		27.50 per annum
Fermented malt liquors		
Brewers		
Producing less than 500 bbls a year		55 per annum
Producing 500 bbls. or more a year		110 per annum
Wholesale dealers		55 per annum
Retail dealers		22 per annum
Temporary dealer in malt liquor and/or wine <u>1/</u>		2.20 per month
Rectifiers		
Producing less than 20,000 proof gals. a year		110 per annum
Producing 20,000 proof gals. or more a year		220 per annum
Manufacturers of stills	(	55 per annum
	(	22 per still or worm
Manufacturers of medicines, food products and flavorings		
Withdrawing not more than 25 proof gals. a year		25 per annum
Withdrawing over 25 but not more than 50 proof gals. a year		50 per annum
Withdrawing over 50 proof gals. a year		100 per annum
<u>Other</u>		
Container stamps, distilled spirits		
Container of less than 1/2 pint		1/4 cent
Container of 1/2 pint or more		1 cent
Export stamps, distilled spirits		10 cents per bbl. <u>2/</u>

1/ Subject to limitations this tax applies in lieu of the annual tax in the case of sales made at fairs, reunions, etc. or entertainments of certain non-profit organizations.

2/ On certain types of packages the tax is 5 cents.

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